

MANUFACTURERS' RECORD.

A WEEKLY SOUTHERN INDUSTRIAL, RAILROAD AND FINANCIAL NEWSPAPER.

VOL. XXIX. No. 9.
WEEKLY.

BALTIMORE, MARCH 27, 1896.

\$4.00 A YEAR.
SINGLE COPIES, 10 CENTS.

Manufacturers' Record.

PUBLISHED EVERY FRIDAY BY THE
Manufacturers' Record Publishing Co.
MANUFACTURERS' RECORD BUILDING,
Lexington and North Streets,
BALTIMORE.

RICHARD H. EDMONDS,
Editor and General Manager.
C. R. MARCHANT, Business Manager.

NEW ENGLAND OFFICE—John Hancock Building,
178 Devonshire Street, Boston, Mass.
S. I. CARPENTER, Manager.

Special Traveling Representatives:
RICHARD S. EVANS,
I. S. FIELD.

SUBSCRIPTION, - - - \$4.00 a Year.
To FOREIGN COUNTRIES, - - 26s. 6d a Year.

BALTIMORE, MARCH 27, 1896.

Hon. J. Sterling Morton, Secretary of the Department of Agriculture, contributes to this issue of the Manufacturers' Record a very interesting letter in regard to the improvements which are being made near Asheville, N. C., by Mr. Geo. W. Vanderbilt. The plans which Mr. Vanderbilt has had in his mind in carrying out this great work, involving an expenditure of from \$5,000,000 to \$10,000,000, were outlined by us some months ago, when the value of his work to the South and to the entire country was pointed out. Secretary Morton, taking up the same thought, shows the vast object-lessons in forestry, horticulture, road-building, gardening, dairying and general farming which Mr. Vanderbilt is presenting to the country in that wonderful "Land of the Sky," and emphasizes the great importance of his work to the people of the entire country.

Caddo parish and Shreveport will never reach the acme of true prosperity until manufactures are more zealously encouraged and rapidly put in operation. The South is a ripe field for these promoters of continually advancing civilization. Shreveport is a most admirably located city for the establishment of manufactures. Her rich mercantile and agricultural people should awaken to the necessity of their establishment in order to reap their benefits.—Shreveport (La.) Times.

Every man in the South must realize the importance of factory development. The manufacturing advance of this section is scarcely great enough yet to enable our people to see the value of industrial interests. Think of a region having 500,000,000 acres of land, stretching from the Potomac to the Rio Grande, admittedly having more natural resources of coal, iron, cotton, timber, water-powers and other elements of successful manufacturing than any other equal area on earth—with a population of 20,000,000—and yet having \$300,000,000 less capital invested in manufacturing than the one State of Pennsylvania—think of this, and then imagine, if you can, the activity of industrial development of the next few years, with a field for expansion to which no limit can be set. Here is to be, as Judge Kelley years ago predicted, "the Eldorado of American development."

Increasing Development of Southern Ports.

The remarkable increase in the exports of grain from Southern ports continues to attract the attention of the country. New York grain shippers are much exercised over the heavy gain at New Orleans and other Southern ports as compared with their city, and the New York papers are devising many reasons to account for the change. As usual, the railroads are blamed, and the papers are vigorously clamoring for some action on the part of the east and west trunk lines that shall stop the movement southward and again give New York its leading position as a grain-exporting point. In this the people and the papers of that city show that they have failed to adequately measure the influences which are at work to bring about a wide, sweeping change in the trade relations of this country. The concentration of business interests at New York, by virtue of its railroads and its financial strength, for many years made that the dominating port in the foreign trade of the country, and gave but little chance for the development of the Gulf or South Atlantic ports. With the growth of the country, which has finally necessitated a readjustment of the many unnatural trade developments of the past and the bringing about of a growth based on natural conditions, there is a marked tendency seen everywhere for a great increase in the volume of business between the South and West. The construction of railroads, reaching to the South Atlantic and Gulf, and the development of Southern ports by the building of grain elevators and other shipping facilities, have forever broken the dominating power which New York formerly held in the foreign business of the country.

The exports of corn from the United States for January and February were as follows:

	1896.	1895.	Increase.
New York...	2,205,583	1,400,364	805,219
Philadelphia...	1,890,773	275,145	1,624,628
Baltimore...	5,552,773	1,203,933	4,348,840
Boston...	384,861	275,496	109,365
New Orleans...	6,868,691	1,476,708	5,391,983

Other customs districts*... 7,577,220 906,500 6,580,723

*Chiefly Galveston, Norfolk, Newport News and Portland, Maine.

In this statement it will be noted that during January and February, 1895, the exports of corn from New Orleans and New York were just about the same, 1,400,000 bushels each; while for the same months of this year, the exports from New Orleans were 6,800,000 bushels, against 2,200,000 bushels for New York. The detailed statistics as to the exports from other Southern ports are not available, but for Galveston, Norfolk and Newport News there was a vast increase, equaling in proportion the gain for New Orleans. This change is not, as the New York papers vainly imagine, due to any temporary conditions, but is simply the beginning of the revolution which must necessarily take place in the foreign-trade interests of the country. The

exportation of corn is only an illustration of a movement now under way, the result of which will be a vast increase in the import and foreign trade of the Gulf and South Atlantic ports, the building up into great commercial cities of ports now of comparatively little prominence, and the development of New Orleans into one of the foremost cities of the world. Other Southern cities—Norfolk, Newport News, Charleston, Port Royal, Savannah, Mobile, Fernandina, Pensacola, Galveston and Texas ports—will all share in this great increase in foreign trade.

The importance of this foreign-trade growth to the South and West cannot well be exaggerated. Coincident with the vast increase in manufacturing throughout the South comes this phenomenal gain in its foreign trade, bringing about in a dozen seaports a great increase in population and wealth. As this trade increases year after year, and the volume of Southern and Western products seeking a foreign market passes through Southern ports in an ever-swelling volume, the import trade will steadily increase, and we shall see along the South Atlantic and Gulf coast a development of cities more marvelous than the growth during the last quarter of a century of the leading Western cities, such as Chicago, Cleveland, Milwaukee and Buffalo.

This all means more general prosperity for the whole South, a greater industrial expansion and an upbuilding of all interests, thus being of vital concern to the manufacturers of the entire country. Western as well as Northern manufacturers may justly regard with great favor this steady expansion of the foreign trade of the South.

Reply to the News and Courier.

The Charleston News and Courier, in referring to the increasing consumption of Egyptian cotton, which is taking the place to some extent of Sea Island cotton, says:

A protective tariff duty on the Egyptian cotton would help the Southern farmers and hurt the New England manufacturers. Of the American purchase of 44,500 bales of Egyptian cotton, 36,000 bales were sent to Boston, 7000 to New York and 1000 or more to Fall River. * * * * *

If Sea Island cotton were grown north of the Potomac river instead of south of it, and were manufactured south of that river instead of north of it, there is no room whatever for a question that the competing Egyptian cotton would have been subjected to a prohibitory tariff duty at least two years ago. * * * * *

The Industrial Record, of Boston; the Manufacturers' Record, of Baltimore; the Press, of Philadelphia, and sundry others of our protectionist friends have had a good deal to say this week about what republican protection has done and is doing to promote the prosperity of the South. * * * * * Will some of them kindly crack this nut?

The Manufacturers' Record does not recognize the News and Courier's intimation that protection is necessarily republican. It looks upon protection as a business principle, which has no relation to the question of politics, and when all social questions can be left out of consideration, protection will be stronger in the South than in any other

part of the United States. The South is destined to be the stronghold of protection.

So far as the Manufacturers' Record is concerned, it takes the ground it has always taken, and it believes that there should be a duty on Egyptian cotton. If the News and Courier will take the trouble to look over the files of the Manufacturers' Record at the time of the Wilson tariff-bill fight, it will note the fact that from the very day on which the Wilson bill was announced, this paper commenced a most active campaign against it, because of its injustice to the South in proposing free trade on all that the South produced and protection on all that New England produced. Free iron ore, free coal, practically free pig iron and free lumber, meant free trade on the products of the South, while full protection on manufactured goods meant a vast advantage to the industrial interests of New England as against the South. Without desiring to make the tariff question a sectional issue, and believing in looking at it from a broader point of view, that is, from the national standpoint and for the good of all, holding that the best interests of the entire country will be served by the well-rounded development of all sections, the Manufacturers' Record yet insists, as it has done in the past and proposes to do in the future, that the South shall not be discriminated against in tariff matters. If the News and Courier can find no more troublesome "nut" than this to crack, it must be having a hard time in looking for arguments.

On April 29 the Southern and Western Grain Trade Congress will meet in Charleston. Arrangements are being made for a large gathering, and it is quite probable that this will be the most noted session of this Congress. The Charleston people are to be congratulated upon having succeeded in inducing President Stuyvesant Fish, of the Illinois Central Railroad, to promise an address on "The Ways and Means to Facilitate Business Between the West and the South." President Fish has been one of the great factors in bringing about closer business relations between the West and the South, and to the work of the Illinois Central Railroad is due very much of the tide of population which is moving to Mississippi and adjoining States and to the great movement of grain through New Orleans. It is, therefore, especially appropriate that President Fish should have been called upon to discuss a matter of such importance as this.

Frank Leslie's Weekly has done the cause of humanity and of Cuban liberty an inestimable service by devoting its entire issue of March 26 to the story of the struggle of Cubans for freedom. The horrors of the "Virginian" massacre of 1873 are vividly presented as an illustration of Spanish savagery in war. Surely this country cannot afford to ignore the heroic struggle for liberty which Cuba is making.

An Important Outline of the Baltimore & Ohio's Policy.

A radical revolutionizing policy on the part of the Baltimore & Ohio Railroad, as outlined in a special interview in this issue of the Manufacturers' Record with Mr. Oscar G. Murray, one of the receivers, is a matter of profound congratulation to all who are interested in that great system, whether as security-holders or as freight shippers. Mr. Murray takes a very broad view of the situation and emphasizes the intention of the receivers to give most ample facilities to shippers, to encourage all industrial developments and to deal with equal and exact fairness with every shipper, permitting no one company or individual to have any advantage over any other in the way of special rates. Such a change in the policy of this system is of more than local interest. It deserves the heartiest commendation of the public, and if Mr. Murray and Mr. Cowen can inspire the entire force of the Baltimore & Ohio with the spirit which is indicated in this interview, this road will soon enter upon a period in which it will be of much greater benefit to this city and to the country tributary to it than it has ever been in the past.

A Bleachery for South Carolina

The Manufacturers' Record recently announced the organization, by Mr. Charles Estes, president of the John P. King Manufacturing Co., Augusta, Ga.; Mr. Thomas P. Barrett and others, of a company to build a bleachery near Augusta. The importance of this move rests to some extent upon the fact that it is engineered by men long and intimately identified with the cotton-manufacturing business, and who thoroughly understand every detail of its operations. Having carefully investigated the subject, they have decided to build a bleachery, and for this purpose have organized the Clear Water Bleaching & Manufacturing Co., with a capital stock of \$150,000, with privilege to increase to \$1,000,000. The bleachery will be built in South Carolina, a few miles from Augusta. The establishment of this enterprise is one of the most important moves which has been made for a long time in the advancement of the textile interests of the South. It will mark a turning point in the diversification of cotton manufacturing in this section.

That industrial matters around Birmingham are prospering and steadily expanding is brought out very clearly in a recent issue of the Birmingham News. Reviewing the industries established within the last six months, the News shows that over \$1,000,000 has been invested in new enterprises and in the enlargement of established plants in and around that city within that time. These include a \$50,000 hog-packing establishment, a \$100,000 cotton mill, \$100,000 pipe works, a \$25,000 cotton compress company, \$100,000 car wheel works, \$15,000 bolt and nut works, a \$100,000 electric power-house and \$500,000 improvements on furnaces by the two leading iron companies of that district.

It has been repeatedly rumored of late in and around Yorktown, Va., that the Cramps, of Philadelphia, have made a large purchase of water-front on the York river, and that they contemplate the establishment of a shipyard in that neighborhood. Whether or not these reports be true, it is quite probable that the time is not far dis-

tant when the Cramps will build a ship-yard at some point on the Chesapeake bay.

A Department of Manufactures and Commerce.

The following additional letters from prominent manufacturers to the Manufacturers' Record show how widespread is the interest in the proposed Department of Manufactures and Commerce:

The Springfield Machine Tool Co., brass and ironworking machinery, Springfield, Ohio: "This meets with our hearty approval, believing the time has come when American manufacturers should be recognized on a par with agriculture. If then the entire consular service is put under the management of the new department, we believe it will be the one grand step towards increasing our foreign trade."

The Cardwell Machine Co., manufacturer of implements and machinery, Richmond, Va.: "We heartily sympathize with you in the move you have made, and trust that the same will be accomplished."

Gates Iron Works, manufacturer of rock and ore breakers and general mining machinery, Chicago, Ill.: "We think beyond question there should be a Department of Manufactures and Commerce added to our government. These interests are so great that it is impossible to calculate the advantage which a close and careful study by such a department would give them. Especially is this so in relation to extending our foreign trade and properly protecting the patented interests of inventors in this country. If there is any point in which the American manufacturers excel, it is in their inventions and methods, and these interests should not only be adequately protected at home, but abroad, so that foreigners could not reap the benefit without giving due compensation."

S. C. Forsaith Machine Co., general machinists, Manchester, N. H.: "Acknowledging receipt of your letter of March 12, asking for an expression of opinion from us in regard to the desirability of petitioning Congress to create a Department of Manufactures and Commerce, will state that we should deem this most desirable, as they are branches most essential to the welfare and prosperity of our country, and with such a department in operation statistics would be available which would be of great benefit in all lines of business. Few people realize the immense volume of business covered in these branches, or the rapid rate of increase in all sections of the Union, and we trust you will push this to a successful termination."

Northwestern Malleable Iron Co., Milwaukee, Wis.: "We heartily endorse the idea incorporated in your resolution to create a Department of Manufactures and Commerce. Our growth as a manufacturing nation seems to demand the recognition which the resolution seeks. We think in our consular service much good could be done should a department be established such as we suggest. In many other ways, manufacturers particularly, and the country at large, would be greatly benefited. We trust Senator Frye will push this bill in his energetic way, and succeed in the endeavor to create the department."

H. Stevens's Sons Co., sewer and railroad culvert pipe, Macon Ga.: "We heartily coincide with you in the suggestion of this to the National Association of Manufacturers, and fully commend their action in adopting the measure, and if Congress will give the petition the attention it deserves, we believe it will be a long stride forward, and of vital interest

to the manufacturers of the United States. If our name has any weight in the matter, we join you in urging Congress to take action in creating the department."

National Hardware and Malleable Iron Works, Philadelphia, Pa.: "If such a department would collect accurate and trustworthy information with regard to business in the United States and elsewhere it would be valuable. We do not like, however, unnecessary multiplication of ornamental departments with various grades of clerks and supernumeraries that only look wise, but are devoid of practical knowledge."

Southern Log Cart & Supply Co., Mobile, Ala.: "We believe that it would be a good thing in every way, and would state that it has our hearty approval."

Webster Manufacturing Co., engineers, founders and machinists, Chicago, Ill.: "We trust Congress will consider favorably your petition to create a Department of Manufactures and Commerce. We have no doubt it would collect much very useful information, and be greatly to the interests of the many industrial workers who depend on the successful carrying out of manufactures and commerce in order to get proper and satisfactory returns for their labor."

Sterling Emery Wheel Manufacturing Co., Tiffin, Ohio: "We should think a Department of Manufactures and Commerce such as you propose would be of great benefit to this country, and we trust that the efforts you are making in that direction will be successful."

Barnard & Leas Manufacturing Co., special mill and elevator machinery, Moline, Ill.: "Concerning petition to Congress to create a Department of Manufactures and Commerce, while we do not fully comprehend the advantages that would be accrued in such a measure, we certainly can see that it would be no disadvantage, and would be, therefore, glad to use our influence in that direction."

James Smith Woolen Machinery Co., Philadelphia, Pa.: "In reply to your favor of the 12th inst., we can only say that we are in sympathy with any movement that will advance and protect manufacturing interests of this country."

S. Morgan Smith Co., manufacturer turbines, power-transmitting machinery, boilers and flume work, York, Pa.: "I write to state at this late date that I am heartily in sympathy with your movement in trying to establish a Department for Manufactures, to have the attention in large measure that is ceded to our departments of Army and Navy. I was never so forcibly impressed with a lack of knowledge on the part of many of our officials in governmental offices as I have been within the last two or three years. During this period a great deal has been spoken and written regarding our relations with different countries commercially, and I am perfectly certain that those in highest authority, and who are entrusted especially with international law and international relations, are greatly lacking in a proper knowledge of the extent of our manufacturing industries in America. By the establishment of a department such as you advocate, the necessity will arise for parties to fill this office who are well qualified, and the people will see to it that none others are placed in position, and this will insure an improvement decidedly in our international relations, and particularly as they relate to our manufacturing industries."

The Dorner & Dutton Manufacturing Co., manufacturer of electric motor and trail car trucks, Cleveland, Ohio: "We heartily endorse your suggestion in regard to petitioning Congress to create a Department of Manufactures and Commerce. The vastness and far-reaching

manufacturing and commercial enterprises of our great country demand it."

Chicago Belting Co., manufacturer of Reliance leather belting, Chicago, Ill.: "We are in hearty sympathy with the movement in petitioning Congress to create a Department of Manufactures and Commerce, and trust pressure may be brought to bear in this matter which will make the issue successful. We appreciate, as manufacturers, your efforts in this direction, and congratulate the Manufacturers' Record upon the able manner in treating the subject, having noticed your recent articles."

Senator Frye's Bill.

The following is the text of the bill to establish a Department of Manufactures and Commerce introduced in the Senate by Senator Frye, of Maine:

"Be it enacted by the Senate and House of Representatives of the United States of America, in Congress assembled, That there shall be at the seat of government an executive department to be known as the Department of Commerce and Manufactures, and a Secretary of Commerce and Manufactures who shall be appointed by the President, by and with the advice and consent of the Senate, who shall have a seat in the Cabinet, and who shall receive a salary of \$8000 per annum; and section 158 of the Revised Statutes is hereby amended to include such department, and the provisions of Title Four of the Revised Statutes, including all amendments thereto, are hereby made applicable to said department.

"Sec. 2. That there shall be an Assistant Secretary of Commerce and Manufactures, to be appointed by the President, by and with the advice and consent of the Senate, who shall receive a salary of \$4000 a year. He shall perform such duties as shall be prescribed by the Secretary or required by law. There shall also be one chief clerk and such other clerical assistance as may from time to time be authorized by Congress.

"Sec. 3. That the said Department of Commerce and Manufactures shall have general jurisdiction over the foreign and internal commerce of the United States, except in so far as relates to the collection of the revenue and the administration of the customs and internal revenue laws; it shall also have jurisdiction over all matters relating to the manufacturing interests of the United States, including the extension of foreign markets for the same, and the increase of trade and trade facilities with foreign countries; and the Secretary of Commerce and Manufactures shall have and perform all the duties now incumbent upon the Secretary of the Treasury in relation to the trade and commerce of the United States, whether the same be upon land or water.

"Sec. 4. That the several bureaus of the Department of the Treasury known as the Life-Saving Service, the Lighthouse Board, the Marine Hospital Service, the Bureau of Steamboat Inspection, the Bureau of Navigation, the United States Coast and Geodetic Survey, together with the Bureau of Statistics, are hereby transferred from the Department of the Treasury to the Department of Commerce and Manufactures, and shall hereafter be under the jurisdiction and supervision of the Secretary of that department; the Bureau of Statistics of the Department of State is hereby transferred from that department to the Department of Commerce and Manufactures, and consolidated with the Bureau of Statistics of the Treasury Department; and there shall be appointed by the President, by and with the advice of the Senate, one chief of the Bureau of Statistics of Commerce and Manufactures, who shall perform all the duty now imposed by law upon the

chiefs of the two bureaus of statistics which are hereby consolidated, together with such other duties as may from time to time be prescribed by Congress, or the Secretary of the Department of Commerce and Manufactures, including the preparation of reports upon the progress, conditions, circumstances and statistics of trade and commerce within the United States and between the United States and all foreign countries.

"Sec. 5. That the consular bureau of the Department of State and the several consular officers of the federal government, including consuls-general, consuls, commercial agents, their deputies, clerks and all other officers of the government resident in foreign countries and charged with the duty of facilitating and promoting the commerce of the United States with the countries to which they are accredited, are hereby transferred from the jurisdiction of the Department of State to the jurisdiction of the Department of Commerce and Manufactures; and said consular officers shall hereafter report to the Secretary of said department of Commerce and Manufactures and receive their instructions from him; provided, however, that the said consular officers, whenever they are required to act in diplomatic capacity in matters not directly connected with the commercial interests of the country, shall continue to report to the Department of State, and to act under the direction of the Secretary of State; and all sections of the Revised Statutes relating to the said consular officers, in so far as they are inconsistent with the provisions of this section, are hereby modified in accordance with its provisions.

"Sec. 6. That the Secretary of Commerce and Manufactures shall annually make a report in writing to Congress, which shall contain an account of all moneys received and expended by him, of all acts done by him in promoting and facilitating the development of American commerce and manufactures, and such recommendations as he shall deem necessary to the further extension of our foreign and domestic trade. He shall also make special investigations and reports on particular subjects whenever required so to do by the President or by either House of Congress, or whenever in his judgment such special investigations and reports shall be required.

"Sec. 7. That all laws and parts of laws relating to the commerce and manufactures of the United States now in existence, as far as the same are applicable and not in conflict with this act, and only so far, are continued in full force and effect."

Summary of New Industries for the First Three Months of 1896.

A summary of the new industrial enterprises projected in the South during the last three months, as compared with the first quarter of 1895, shows the following:

Description of Industries.	First quarter 1895.	First quarter 1896.
Iron furnaces.....
Machine shops and foundries..	23	13
Stone foundries.....	1	..
Miscel. iron and steel works..	12	13
Woodworking establishments, including saw mills, planing mills, etc.....	122	140
Furniture factories.....	5	11
Carriage & wagon factories..	4	4
Agrical implement factories..	5	..
Mining & quarry companies..	62	71
Flour mills.....	37	22
Textile mills.....	42	37
Cotton compresses.....	7	3
Cottonseed-oil mills.....	..	7
Brick works.....	12	20
Canning factories.....	18	12
Ice and cold-storage plants..	25	22
Electric-light & power plants..	30	35
Gas works.....	3	5
Water works.....	28	16
Miscellaneous not in above..	455	464
Totals.....	891	895

SECRETARY MORTON ON BILTMORE

Hon. J. Sterling Morton, Secretary of Agriculture, Writes of Mr. Vanderbilt's Work in Western Carolina.

United States Department of Agriculture, Office of the Secretary.

Washington, D. C., March 19.

Editor *Manufacturers' Record*:

I hasten to acknowledge your request that I should furnish you a description of the Vanderbilt improvements at Biltmore, near Asheville, in the county of Buncombe and State of North Carolina.

It would be of great value to the country if all the home-builders throughout the North, South, East and West could make a pilgrimage to Biltmore and traverse its many avenues of beauty, bordered as they are with the best type of aboriginal and floriculture.

To give a good mental image of this great lesson which Mr. Vanderbilt's energy, good taste and well-directed expenditures have written upon the hillsides and valleys of his vast estate, is beyond my power as a word artist. The grounds, consisting of 95,000 acres, were laid out by Frederick Law Olmstead, and the architecture was designed by Hunt, two surpassing masters in their respective vocations, who as yet have no superiors either in the United States or elsewhere. The forestry is managed by Dr. Schenck, an educated German forester, and yet in the employ of the German Empire. His work has been carried out with great precision and remarkable success. The trees are all planted under his immediate direction and supervision. The deciduous trees as well as the conifers are all thriving vigorously.

The roads (and there are 100 miles of macadam driveways on the estate) are in charge of Mr. Gall, a Scotch expert in road-building and management.

The dairy and cereal crops are under the management of Mr. Weston, who is a fine chemist and graduate of an agricultural college and a practical farmer of some twelve or fourteen years' experience. The dairy herd of Jerseys are very promising indeed. Each animal is numbered and tested as to milk, cream and butter capabilities day after day by the best and most approved appliances for such tests.

The propagating houses and truck gardens are all in charge of Mr. Beadle, who graduated from Cornell University in the class of 1890. His intelligent management of the great interests entrusted to him is visible in the plant life and the vegetable gardens.

But, as I said in the beginning, it is not possible to describe so as to convey a correct image the vast object-lessons in forestry, horticulture, road-building, gardens, dairying and general farming which Mr. Vanderbilt is inculcating amidst the mountains of North Carolina.

The time is not distant when every intelligent citizen who desires to found a new or embellish an old estate will be desirous of making a pilgrimage to this Mecca of intensive agriculture and refined taste. The chateau at Biltmore is in the French Gothic style of architecture. It has cost a great many hundreds of thousands of dollars, and upon the grounds and the buildings together rumor declares something more than \$3,000,000 have been expended.

The economic lesson of the Biltmore estate is also a practical and beneficent study. It represents a result of the self-denial, industry and frugality of the grandfather of its owner. It teaches that every human home, in fact, every structure in modern civilization, represents some economy and self-denial on the part of members of the human family. In a

barbaric state there was no individual self-denial, no permanent homes, no planting of trees, no cultivation of flowers, no effort for the acquisition of the beautiful. The fact that Biltmore has in its construction and in the laying out and embellishment of its grounds employed thousands of men at remunerative prices, illustrates the absolute necessity of the accumulation of capital in order that a wages fund may be created with which to pay laborers. It further shows that the law of wages is governed by the law of supply and demand, because it has put up, by the demand which it has made, the price of efficient, desirable day labor at Biltmore.

Under the direction of Mr. Chas. McNamee, the general manager of the estate, a system of genuine civil service has been inaugurated. The better workmen are promoted and their pay advanced as they develop persistent industry and fidelity to duties. The indolent, the intemperate, the quarrelsome and inefficient are demoted and sometimes discharged.

No man has expended so vast a sum of money upon any one estate in the American republic, and no man has done more than Mr. George W. Vanderbilt to awaken the public mind, in any one Commonwealth, to the utility and beauty of forestry in general. The homes in and about Asheville are, as a rule, being improved by further adornment of structures and tasteful embellishment of grounds. The entire country adjacent to Biltmore (which is only two miles from Asheville) seems permeated with the patriotic purpose of making permanent, substantial and attractive homes. As a love of home is primary patriotism, and as the army and navy are always, in time of national peril, replenished, as to the better element, largely from rural homes, the work at Biltmore is of that kind which, carried on by every home-builder in proportion to his means, will solidify and perpetuate the American republic.

The millions of dollars which Mr. Vanderbilt has expended have, each and every one of them, been up to the gold standard in purchasing power. The vast sum of money which he has paid out in North Carolina during the last seven years has been equal in buying power to the best money of the world. Those who have exchanged labor and materials for that money have been able to exchange each dollar which they received in the European markets at the same value at which they accepted it. North Carolina, however, although the oldest gold-producing section of the United States, and notwithstanding the fact that large investments for re-energizing the gold product of that Commonwealth are now being made, and notwithstanding the further fact that North Carolina is not a silver-producing State, contains a population very thoroughly saturated with the fallacy of the free coinage of silver at 16 to 1.

Is it not inexplicable that a people whose gold mines are about to be worked to their utmost capacity should favor a monetary system which will compel each gold miner to secure 100 cents worth of gold (at bullion valuation) before he can legally present it at a United States mint and demand thereout of the coinage a gold dollar; and which at the same time will permit every silver miner in Colorado, Montana, Idaho or elsewhere to demand a dollar coined by the United States out of every forty-eight cents' worth of silver (at bullion value) which he shall produce?

J. STERLING MORTON.

A dispatch from Sabine Pass, Texas, states by the improvement work now in progress a ship channel twenty-four feet deep has been excavated from the Gulf of Mexico into Sabine lake.

GOLD REDUCTION WORKS.

The Blackburg Plant in Operation.

[Special Cor. Manufacturers' Record.]

Blackburg, S. C., March 21.

In Colorado, and especially around Leadville, the poisonous fumes of sulphur escaping from the stacks of reduction works, expelling the sulphur to liberate from refractory ores gold, silver, lead and copper, float over the adjacent hills, poisoning the atmosphere, not only giving the denizens of the surrounding country annoying and hacking coughs, but even drying up the stunted sage brush and withering the other plants and trees around. Reduction works are to be met with out there almost as commonly as wheat and corn grinding mills were in Virginia in the olden times. These plants, in which hundreds of thousands and even millions are invested, have been built to grind or stamp, concentrate, smelt or chlorinate and separate the precious metals from the refractory ores by processes heretofore unknown, and of which little is even now known by many of our most intelligent people.

In the great gold-producing sections of the Pacific slopes, and in the basins and recesses of the great Rocky mountain chain, the placer and free-milling ore mines have had their day, and are now generally exhausted and worked out. Hence, the sulphur or refractory ores now come into play, and newly-discovered processes liberate and free the gold from them. The erection of these large plants, and their opening to the public to mill and reduce ores on royalty or for a specific sum, or, as buyers, to purchase the ores on their assayed value, has brought into operation numberless small but good mines, owned or leased and operated by men of small means. The old goldfields of the Carolinas and Georgia, once the sole source of supply of this precious metal in the Union, have had their day for placer or free-milling ore mines. Such mines have, as a general rule, been worked out or exhausted, and no longer afford free gold in sufficient quantities to pay for working them, and yet the free gold output of the past was but a small fraction of the gold known to exist in the many leads of refractory ores met with everywhere in this "Ophir," as it was known prior to 1849. However, in the Southeast there has heretofore been no public or custom mills to supply the wants of miners. This defect has been happily remedied in this section by the erection of the Carolina Reduction Works at this place. At the head of this enterprise is Major John F. Jones, a New Englander and old time railroad man, who, after a residence of ten years, has become wedded to this spot. These works have recently been enlarged by adding a fourth furnace, a revolving reverberatory furnace and a complete and well-constructed chlorinating plant, now in successful operation. Mr. P. S. Gilchrist, an eminent English chemical engineer, is in charge of the operation of this plant, part of which is from his own designs. This company has every facility for operating, as from its own mines it can draw full ore supplies, and yet, as it is anxious to do all possible to develop the resources of the country, it has opened its mills to reduce such ores as may come to its plant.

A shipment from Buford, near Gainesville, Ga., has lately been operated on to the entire satisfaction of the mine-owner, an operator from Cripple Creek now owning and working mines at Buford, Ga., who came with his ores and remained to see them milled and reduced. This experienced Western man expresses himself as highly pleased with the entire works.

Here the poisonous sulphur fumes are conducted into acid chambers, and the

sulphuric acid made therefrom is piped to the Blacksburg branch factory of the Virginia-Carolina Chemical Co. This company is now turning out large quantities of commercial fertilizers daily to fertilize the soils and increase the crop products of the surrounding country, thus utilizing the poisonous sulphur fumes to make this section bloom and to cover it with verdure, not to blast and wither everything green, as in Colorado. What is there a curse is here turned into a blessing. This last plant is the first outcome of the Carolina Reduction Works, but there will, ere long, be a much needed adjunct to the fertilizer works—a cotton-seed-oil mill to supply meal as a basis of the best of fertilizers. J. L.

A WILDERNESS BECOMES A CITY.

Some Facts About the Fitzgerald Colonization Movement.

[Editorial Cor. Manufacturers' Record.]
Tallahassee, Fla., March 12.

A great deal has been written about the new colony town, Fitzgerald, in Georgia. Very few persons, though, have anything like an accurate idea of the proportions and the significance of this enterprise. In a locality that six months ago was practically a wilderness, without railroads, without contact with the outside world, cut off from civilization, there is today a thrifty, active, pushing town of from 6000 to 8000 people, with its population growing every week. Where a few months ago there was a sleepy and decayed village of seven small tumble-down and dilapidated houses, with a few adjacent badly cultivated farms, the whole surrounded by thousands of acres of untouched pine forests, there are today such scenes of activity as are only witnessed in the most active and stirring towns and cities. There are numerous hotels and boarding-houses; there are dry-goods stores, shoe stores, grocery stores, drug stores, house-furnishing stores, furniture stores, and, in general, mercantile establishments of almost every conceivable sort. There are lawyers, doctors, preachers, and, of course, a large quota of real estate agents. There are two newspapers. There is a bank, well established and doing a good business, and a branch of another bank.

Four or five weeks ago the Abbeville & Way Cross Railroad, which ran from Abbeville, Ga., a station on the Georgia & Alabama Railroad southward toward Fitzgerald, was bought by the Georgia & Alabama road and extended to Fitzgerald. Until then there had been no railroad connection, and all the supplies of every sort had been hauled in wagons for many miles.

Every hotel and place of entertainment in the town is crowded all the time to its utmost capacity. When I went there recently, I reached the town about 7 o'clock in the evening. I was directed to what was said to be the principal hotel in the place, which I found to be a one-story shanty, built of one thickness of unplanned boards, nailed upright. There was no room to be had in this caravansary, and I started on a tour of the place, with my valise, in search of somewhere to sleep. My last application was made at a boarding-house, the landlady in charge of which assured me that it was absolutely impossible to make room for me; that she had been turning away applicants all the evening. Finally, however, I induced her, by importunate appeals, to persuade one of her regular boarders to go somewhere else and sleep with a friend and give me his small place in a narrow bed with another man, in a small room in which six men had to sleep.

A remarkable thing about Fitzgerald is that the population was secured before

the town site was fixed upon. Readers of the Manufacturers' Record are familiar with the history of the movement, and Mr. P. H. Fitzgerald, the originator of it, has already told, in a letter to the Manufacturers' Record, how the colony came to decide to go South.

As soon as the proposed location of the colony was announced, some of the members began to make preparations to move down to Georgia. Mr. Fitzgerald urged the members of the colony to stay away until the land was ready for them. There was no railroad connection; the land had to be surveyed and platted; some shelter had to be provided and lands gotten ready for occupancy. In spite of warnings and entreaties, however, within a very few weeks after the location of the colony had been decided upon, the colonists began to arrive, singly and in small parties, and they have been coming ever since—some by rail, and some from Iowa, Kansas, Nebraska and the Dakotas in immigrant wagons.

The present appearance of Fitzgerald is not promising. When colonists began arriving it was necessary that they should be able to provide some sort of shelter for themselves. A location was fixed upon on the edge of the proposed town site, and all who came were permitted to put up within that area any sort of structure desired, with the understanding, of course, that it was subject to removal at will, and that no title to the land could be had. Every building, therefore, was intended for temporary use, and was put up, of course, in the cheapest possible manner. It is a town of shacks and shanties. There are hundreds of houses built of unplanned boards and slabs from which the bark has not been removed. Nothing so crude has ever been seen, except, possibly, in mining towns in the West. Many persons who have visited Fitzgerald have assumed that this was the town as it was going to be, and some wholly unjustifiable newspaper criticisms have grown out of this assumption. The permanent site of the proposed town is beginning to present a vastly different appearance. The pine forest has been cleared away, the trees cut and sawed into lumber, the waste burned up and stumps dug out and burned. Streets have been laid out and graded; shade trees have been planted along the principal streets, and a number of substantial dwellings and stores are being erected. A fire limit has been established, within which nothing but brick and stone will be allowed as a building material. A stone hotel, with eighty rooms, is to be erected at once within this area. The bank, about which I spoke a moment ago, will put up at once a handsome stone building, and numerous brick and stone stores have been planned.

Within a few months the shanties which at present constitute the bulk of the town will have been demolished, and Fitzgerald will be a substantial, thrifty, well-arranged, well-ordered city, with handsome buildings, paved streets, water works and all the modern accessories of city life.

It has been very generally believed that the majority of the colonists settling at and around Fitzgerald are persons without means. Nothing could be further from the truth. It is quite true that a number of the members of the colony have brought all they own in the world in emigrant wagons, but these are not in the majority. There are well-to-do farmers, merchants with ample capital for business undertakings they have in view, capitalists who will build houses and stores to rent, and others who will engage in manufacturing enterprises, and investors looking for opportunities for profitable operations in real estate.

The day before I was there a member

of the colony had asked Mr. Fitzgerald to take care of \$11,000 in money that he had brought with him. A day or two before that, another man had asked him to take care of \$6500 in cash that he was carrying around in his pockets.

There are, as members of the colony, about 10,000 heads of families, representing 40,000 or 50,000 persons. Only 6000 or 8000 have so far gone to Fitzgerald. Every State in the Union is represented in the membership, and there are some from Canada.

The success of this enterprise up to the present time, and its exemption from mishap, delay and disaster of every sort, is marvelous. Of course, there have been difficulties to contend with, and there have been minor drawbacks and trifling discouragements. The astonishing fact is, that these have not been greater. There has been some sickness, but very little, comparatively. It is amazing that among 7000 or 8000 people, including women and children, old and feeble persons, and some infirm and delicate ones, all subject to more or less privation, to insufficient shelter and to change of food and water, following the fatigue of long travel—it is amazing, I say, that there has not been a great deal of sickness, and that there have not been a great many deaths. The fact that there has been so little is a fine demonstration of the healthfulness of the locality.

It is remarkable, too, that among so many people there have not been found a considerable number of disappointed and dissatisfied, and particularly when the present crude conditions are considered; but there have probably not been a dozen families that have cared to withdraw from the colony and go back to their old homes. The few cases of sickness that have occurred, and the few disappointed colony members, have been eagerly seized upon by those captious persons whose chief pursuit is to find fault with and rail at the plans of other people, and by certain Northwestern newspaper writers, and heralded as indications of disintegration, demoralization and collapse. It may be safely said that there is not anywhere an enterprise of any sort more full of vigor, vitality and promise than this Fitzgerald colony.

There is one possible danger: Although the town is to be provided with water from deep wells, these have not yet been completed. The several thousand people living in the temporary part of the town, "Shacktown," as it is called, are drinking from shallow wells. Moreover, there are no arrangements for the removal of sewage. If this condition should continue until warm weather, there would be danger of much sickness. I am assured by the authorities, however, that these difficulties will be removed in a short time; that work on the artesian wells for water supply is being pushed with the utmost vigor, and that all necessary sanitary arrangements are being provided in the town proper.

This section of country is notably healthful, normally, and with a proper regard for the laws of sanitation there need be no sickness whatever, except such as is unavoidable under any conditions of climate.

As I said a moment ago, the Georgia & Alabama Railroad has extended its Abbeville & Way Cross branch to Fitzgerald, and has constructed extensive sidings and switches for the handling of freight. Fortunately for this enterprise, the policy of the Georgia & Alabama, under its present management, will be to encourage all development in its territory. It is interesting to note that this, the most recently reorganized of the Southern roads, and now one of the most ambitious and aggressive, has in its territory the largest

colony movement yet initiated in the South.

There has been a good deal of inquiry as to what these colonists will do for a living. The majority of them will engage in agricultural pursuits. The location is in the great "peach belt" of Georgia. It is an area equally noted for its water-melons and for grapes and other fruits. It is admirably adapted also for general farming and for stock-raising. As has been stated, some of the colonists will engage in mercantile pursuits, some in manufacturing undertakings; others are bankers, lawyers, physicians, and, in fact, almost every calling and profession is represented in the membership of the colony.

WILLIAM H. EDMONDS.

Since the above was written, the Manufacturers' Record has received, under date of March 17, a letter from Mr. P. H. Fitzgerald, president of the colony company, in which he says:

"Our colony now numbers over 9000 people. Our first railroad reached the city of Fitzgerald four weeks ago. At this date we have within the city limits, built and under construction, 840 buildings. This includes business, store houses and residences. Up to this date we have been unable to build other than frame buildings. This week, however, we have our first brick bank building partially up. We now have under contract eleven first-class brick and stone buildings. The large Colony Hotel will be built by the colony itself, and will cover the space of 170x175 feet, three stories high, patented after the De Soto Hotel at Savannah. Mr. P. H. Fitzgerald will begin the erection of a large business block at the corner of Central avenue and main street, two stories high, with twelve storerooms below, office rooms above, to be built of brick and stone, covering the space of one-quarter of a square. Capt. W. O. Tiff, of Tifton, will erect a marble-front brick bank building. J. O. Shepherd and Mr. Wm. R. Bowen have under contract a business block of brick and stone, containing four storerooms below, with hall above. The G. & A. Railroad is now completing a mammoth freight depot, 40x200 feet, also an excellent passenger depot. Col. H. H. Tiff is now but four miles out with his road, the Tifton & Northeastern Railroad. He has also under contract both freight and passenger depots. We have eleven saw mills, two shingle mills and two ice plants under way. The Standard Oil Co. has leased grounds for their building. The Armour Packing Co. is seeking a location. We are putting in twenty-four deep wells, ranging from 101 to 250 feet deep. The G. & A. R. R. is putting in a six-inch well to strike an artesian flow. Our members are fast settling upon their lands, closing them up and building homes. They are generally well pleased, and are working to the general welfare and a grand success of the colony. We have secured 20,000 acres more lands, which takes us to the Ocmulgee river, where we have a beautiful landing. The river here has a channel of thirty-six to forty feet, and is one-fourth of a mile wide. Our intention is to call this after our city, Fitzgerald Landing, and to build a city at the landing, with one or two large resort hotels. We shall connect the two places with an electric line of cars. All things tend toward making our colony one of the most attractive places South for Northern tourists to go. With river outlet to the ocean, we see nothing in our way to a successful completion of our plans."

If you are thinking of enlarging your mill, factory or mine, or of purchasing machinery of any kind, send us a postal card giving the character of machinery needed.

RAILROAD NEWS.

[A complete record of all new railroad building in the South will be found in the Construction Department.]

BALTIMORE & OHIO'S FUTURE.

Receivers Cowen & Murray Outline the Policy of the Company Under its Present Management.

Local Freight Traffic to Be Developed Wherever Possible To Encourage Industrial Development—

All Rolling Stock to Be Overhauled, and 5000 Cars and 75 Locomotives to Be Ordered—A Broad and Liberal Policy to Be Carried Out.

The Manufacturers' Record presents in detail the first official announcement of the policy of the Baltimore & Ohio Railroad under its new administration. The receivers, in a special interview, have outlined the policy which they intend to carry out in the management of this great property. Mr. Murray was formerly vice-president of the Cleveland, Cincinnati, Chicago & St. Louis Railroad, and is one of the best known railroad officials of the country, combining a thorough knowledge of the practical and financial elements of railroading with unusual executive ability and determination. Mr. Cowen is so well known in this community that it is needless to say that a combination of two such men as receivers of the Baltimore & Ohio gives assurance that the broad policy which they have planned will be carried out.

Replying to a question as to the policy of the Baltimore & Ohio regarding freight traffic, Mr. Murray said:

"We shall encourage the freight business in every way possible. I believe that enough business can be secured from the territory along the route to operate the road on a profitable basis, and that it is not absolutely necessary to depend on what through business may be received. I do not mean by this to say that we shall not secure what business we can from our connections and from distant points. We want that also, but we shall promote local traffic wherever possible.

"Fully recognizing the importance of the coal interests tributary to this line in Maryland and West Virginia, and that a very large revenue may be derived from this industry, it has been one of the first matters to secure our careful attention. We have decided to place a division freight agent at some central point, Grafton, Fairmont or Clarksburg, whose duty it will be to make equal rates on coal, lumber and similar products, to see that shippers obtain prompt car service and to attend to their needs in every way possible. We shall not engage in rate-cutting, neither will we attempt to haul coal or other freight at unprofitable rates; but the Manufacturers' Record can say that no partiality will be shown any company whatever. The policy of the road will be to give even and exact justice to all. We are in business for the benefit of the railroad, and will pursue a uniform policy to all shippers, large and small.

"Every additional coal mine opened, every saw mill established or other industry located tributary to the Baltimore & Ohio Railroad necessarily means that much more local freight. Intending to encourage as we do the fullest development of local business, we must exercise a liberal policy and endeavor to secure the investment of as much capital in manufacturing and mining enterprises along our line as possible. In this connection we shall heartily favor the building of short branch lines or connecting links by others who wish to open up important

properties and reach an outlet through the Baltimore & Ohio. We will assist in every legitimate way in our power the establishment of industrial interests, and they will receive equal rates and as good transportation facilities as any other similar enterprise."

One of the most pressing needs of the Baltimore & Ohio Railroad is additional rolling stock, and in reply to a question as to what increase or improvements will be made in the equipment of the road it was stated:

"We have given orders for every shop on the line under our jurisdiction to be operated on full time at repair work alone. It is our intention to overhaul and repair every locomotive and car that will justify the outlay. This will necessitate the employment of our entire force. Consequently, all orders for new locomotives and cars will be given to outside concerns. It is true that the Baltimore & Ohio system has not enough rolling stock to properly handle its business, and the necessity for more is imperative, although much of that which we now have out of repair can be made serviceable in our own shops.

"We intend ordering 5000 freight cars as soon as possible, and also about seventy-five locomotives. Of the freight cars a large proportion will be coal cars, which may indicate the importance with which we regard our coal trade. The remainder will be box cars for miscellaneous freight. Of the locomotives a small number, twelve or fifteen, will be for passenger service, as our locomotives in this respect are, as a rule, of a high standard. The balance will be for hauling freight. This rolling stock is for the Baltimore & Ohio proper, over which our receivership extends."

Replying to a question as to the policy of the receivers in regard to the Baltimore & Ohio terminals, it was advised:

"Not having made an official inspection of the line as yet, we cannot say positively. We are aware that an appropriation was made some time ago for facilities at Pittsburg and at Cumberland, and we believe that a part of the work was completed in the latter city. Doubtless the Pittsburg terminals will be of great value to us, and it is probable that those at Cumberland will also be needed. We have not examined the Mt. Clare shops at Baltimore as yet, but consider that they are located to great advantage with relation to the system, and think it probable that it will be advisable to maintain them as at present, and possibly to increase their capacity.

"It is our aim to maintain the passenger service at as high a standard of efficiency as possible. Whether any additional trains will be put on between Washington and New York we cannot say at present. This will depend on the amount of business. All of the sleeping, drawing-room and day coaches will be renovated and refurnished, and wherever necessary new ones will be added. It is our intention to give as good service as possible to Chicago, Cincinnati and the West, and to operate trains strictly on time, so that a passenger can always depend on the schedule. At present trains from Baltimore and Washington are run to Chicago by way of Wheeling and by way of Pittsburg. We have not decided as yet whether to continue this mode or to use one route exclusively. As to the roadbed on the Washington and Philadelphia division and on the main stem, much of it is in excellent condition, especially as to rails. We may relay some portions which need new rails later."

In discussing the tidewater terminal facilities of the road, they stated:

"We shall not discriminate in favor of any city as against any other. We recognize the fact that Baltimore is much

nearer the South and West than Philadelphia, and that this city is entitled, by virtue of that, to consideration in the matter of freight tariffs. We also take into consideration that vessels must come 200 miles from the open sea to reach Baltimore. Whatever may have been the policy towards these cities in the past, it is our intention to haul all coal and other freight to Baltimore for shipment by water, which would naturally come to this city under an equitable adjustment of rates. As far as we know, our terminals at Baltimore are as good as at Philadelphia, and of course there is the extra haul of ninety miles to that city to be considered. I will say that we have a deferential in favor of Baltimore. At the same time we recognize that Philadelphia is the most Northern terminus of the road, and is entitled to all the consideration which its importance as a seaport and as a traffic-producing territory deserves. As we have already stated, no partiality will be shown by improperly diverting traffic from any city. It is also the intention of the present management to deal as liberally as possible with steamship companies in order to secure the best facilities for increasing and developing our export business."

In reference to the grain trade:

"In regard to the movement of grain to ports further south than Baltimore, we have the right to make the same rates on grain as the Chesapeake & Ohio, for example. Of course, the distance from the ocean to our own terminals at Baltimore is much greater than from Newport News or Norfolk, as these cities are practically on the Atlantic coast; but we shall not neglect this branch of business any more than any other through freight business; and as the Baltimore & Ohio still maintains intimate relations with the Baltimore & Ohio Southwestern, we have as many advantages as at any time in the past for obtaining our share of such freight."

Trains into Augusta.

A dispatch from Augusta, Ga., states that Vice-President Mike Brown, of the Carolina Midland, has made an agreement with the Port Royal & Augusta Company whereby trains of the Carolina Midland will be run over the former road into Augusta. The roads connect at Alendale, S. C.

To Carry Virginia Truck.

In a letter to the Manufacturers' Record, Mr. C. R. Warren, secretary of the Portsmouth, Newport News & Pig's Point Company, writes as follows:

"The length of the road will be about ten miles, from Portsmouth to Pig Point, connecting with a line of steamers or a ferry to Newport News, three miles distant. We are undecided yet about the motive power for the road. Our charter calls for a standard-gauge road, so we can not say if it will be run by steam or electricity. The hotel to be built at Pig Point will contain not less than 150 rooms.

"There is no doubt whatever as to the company building, for the principal incorporators are among the wealthiest truck farmers in Norfolk county, and by building this line it will give them quick transit to all the principal markets. At Pig Point we have the Nansemond and James rivers, Hampton Roads and Chesapeake bay at our feet. As to whether the company will issue bonds to build the road or not I cannot say, only so far, if they should decide to issue bonds, it will be to a limited amount, and very small at that, as the incorporators own nine-tenths of the land through which the road will be constructed, and they also own all the property at Pig Point."

Atlantic & Danville Extension.

Relative to the Western extension of the Atlantic & Danville road, President Newgass advises the Manufacturers' Record as follows: "No arrangements have been made for any extension of our road from its present Western terminus (Danville), nor have any arrangements been made with any neighboring or projected lines. The intention and interest of the Atlantic & Danville will ultimately be to extend in a discreet way, though the times must be more propitious than they are now for such undertakings."

A Texas Road Completed.

A dispatch from Galveston, Texas, states that the Gulf & Interstate road has been completed between Beaumont, Texas, and Point Bolivar, on Galveston bay. This marks an epoch in the railroad history of the State. The road was begun nearly three years ago by the Gulf & Interstate Company. It was intended to form part of a system from the Gulf of Mexico to the northern boundary of the United States, but this idea has long since been abandoned. The road is about seventy miles long, and is the most direct line from Galveston to the North. It will probably form a connection of the Kansas City, Pittsburg & Gulf system, now being built from Kansas City to the gulf, giving a new route between Kansas City and Galveston.

Choctaw, Oklahoma & Gulf.

It is announced that the Choctaw, Oklahoma & Gulf Co. has formulated a plan for an issue of 80,000 shares of preferred stock to enable the company to provide for the extinguishment of its car trusts and extension of its lines. A large portion of the new issue has already been underwritten and 75 per cent. of the general mortgage bonds assented to. The plan proposes to reduce the obligatory charges from \$325,000 to \$210,000. The following securities will be taken by the company in payment for the stock: General mortgage bonds, \$1,200,000; income mortgage bonds, \$1,110,000; cash, \$650,000—total, \$2,950,000. By this arrangement the company is enabled to retire \$2,000,000 of existing obligations, build a connection with the Kansas City, Pittsburg & Gulf Railroad and secure \$192,000 cash for present use, besides leaving \$1,500,000 general mortgage bonds in its treasury. This company, in which Philadelphia and Baltimore parties are interested, has 225 miles of line in the Indian and Oklahoma Territories, reaching the famous Choctaw coalfields. It has recently completed an extension 122 miles long from South McAlester to Oklahoma City. The proposed extension to the Kansas City, Pittsburg & Gulf would give it an entrance to Kansas City and an outlet to the Gulf and to the Northern markets. Mr. Francis I. Gowan, of Philadelphia, is president.

More Cattle Shipments.

The shipping of live cattle from New Orleans, so successfully inaugurated a few weeks ago, bids fair to become very extensive, as well as a permanent business. On March 20 the steamships Louisiana and Floridian loaded 244 head for Liverpool. These ships, in ordinary weather, will make the run in about sixteen days. Their equipment for the business is practically perfect. The cattle, which are an exceptionally fine lot, came from Dallas, Texas. They were raised in the northeastern portion of the State. The owner, Mr. J. B. Wilson, accompanied the shipment to New Orleans. They were sent by way of the Texas & Pacific road in a special stock train.

THE GEORGIA & ALABAMA.

New Short Line Between Savannah and Montgomery—Its Important Connections.

One of the most important railroad moves which has lately occurred in the South is the arrangement made by the Georgia & Alabama Railroad for gaining an entrance into Savannah. As the Savannah, Americus & Montgomery, this line was practically a feeder or an Alabama extension of the old Georgia Central system, being obliged to depend upon the latter's train service from Lyons, its eastern terminus, to Savannah. With the reorganization of the Savannah, Americus & Montgomery steps were taken to make it a through line between Savannah and Montgomery. In this the company was eminently successful. By a lease of seventy miles of the Savannah & Western division of the Central, the Georgia & Alabama will operate its trains solid between Montgomery and Savannah, 310 miles, beginning April 1. It will have the use of the Central's terminals and depot at Savannah, also the latter's tracks and wharves on the harbor. This includes the docks of the Ocean Steamship Company, which gives the Georgia & Alabama a northern connection by water with New York and Philadelphia by the vessels of this line.

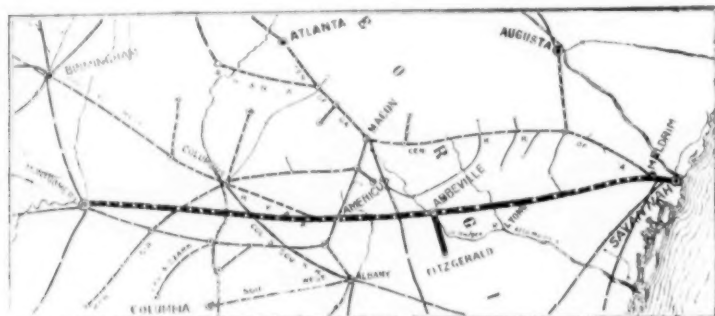
By the arrangement just concluded

which Savannah would be placed much nearer the West than it now is. At Savannah the Georgia & Alabama meets the Atlantic Coast Line and the Florida Central & Peninsular, in addition to the Plant system, thus giving it important Eastern and Florida connections, while, by its connection with the Georgia Southern & Florida, it forms a shorter route from points in Alabama to central and South Florida.

Some of the financial advantages secured by leasing the line from Lyons to Savannah, instead of building a new line, are these:

The company saves \$800,000 in construction and \$500,000 in terminals, thereby lessening its prospective liabilities \$1,300,000. An addition to gross earnings estimated at \$300,000 per annum is confidently expected. It obviates the necessity of building a connecting line of seventy-five miles, thereby not only relieving it from the antagonism of a powerful railway system, but giving friendly relations with it.

The following statement shows already how the road's earnings are increasing under its new management: Week ending March 15, 1895, \$8684.21; 1896, \$11,122.18; increase, \$2437.97. Two weeks ending March 15, 1895, \$17,368.42; 1896, \$22,067.31; increase, \$4698.89. August 15 to March 15, 1895, \$285,465.01; 1896, \$345,315.38; increase, \$59,850.37.



GEORGIA & ALABAMA RAILROAD AND CONNECTIONS.

the Georgia & Alabama has a shorter route between Montgomery and Savannah than any other line by nearly eighty miles. A glance at the accompanying map will show what an important factor it is to be in the railroad situation. While it has two of the principal Southern cities as terminal points, it is in a position to secure an extensive local business in freight and passengers from the section of which it is now the principal outlet to market. Along the route are several very prosperous towns, among them Americus, a city of nearly 7000 people, and an important railroad junction; Cordele, at the junction of the Georgia & Alabama and the Georgia Southern & Florida, a thriving place of about 3000 people, and Abbeville, another railroad junction, where the Abbeville & Way Cross division of the road extends to the colony city of Fitzgerald, which now has 8000 people. In addition to this, several other large colonies are to locate along the road, thus adding additional traffic to its business.

With much the shortest line to Savannah, the Georgia & Alabama is now in a position to make important traffic arrangements and to become a section in a new trunk line from the West and North to the seaboard. At Montgomery it connects with the Western Railroad of Alabama and the Louisville & Nashville main line. It is geographically the natural outlet of the Louisville & Nashville lines in the Alabama mineral district to tide-water. Birmingham is the present terminus of the Kansas City, Memphis & Birmingham. By an agreement between this road, the Louisville & Nashville and the Georgia & Alabama, a new route from Kansas City could be formed by

South and West Congress

The South and West Congress is to be held this year at Charleston, S. C., on April 29. As readers of the Manufacturers' Record are aware, it is intended to encourage the trade relations of the South and West and the development of commerce from Gulf ports. Unusual interest is attached to the Congress this year owing to the notable increase in the export business of New Orleans, Galveston and Mobile. Mr. John A. Smith, of Charleston, is secretary of the executive committee. It is announced that President Stuyvesant Fish, of the Illinois Central, which has been responsible for largely increasing the exports through New Orleans, will be present and read a paper on "The Ways and Means to Facilitate Business between the West and South."

A Prosperous Company.

At the annual meeting of the stockholders of the Merchants & Miners' Transportation Co. of Baltimore, Messrs. George J. Appold, Michael Jenkins, Henry James and Decatur H. Miller, Jr., of Baltimore, and Ellerton P. Whitney, of Boston, were re-elected directors. President George Appold, Vice-President Michael Jenkins and Secretary C. A. Layfield were also re-elected.

The Merchants & Miners' is one of the most prosperous companies in the coastwise business. Its steamships run between Baltimore, Savannah, Ga., Norfolk, Portsmouth, Newport News and West Point, Va., Providence, R. I., and Boston. It has an extensive fleet of vessels, and is a prominent factor in the transportation interests of the South.

The Mississippi Bridge.

According to Mr. E. L. Corthell, the engineer who selected a site for the proposed railroad bridge across the Mississippi river near New Orleans, work will begin on it this year. This bridge will be one of the largest in the world, and plans for it have been prepared by the Phoenix Bridge Co., of Phoenixville, Pa., the reported contractors for it. It is understood that both the Southern Pacific and the New Orleans & Western Companies may use it when completed.

Busy Southern Car Works.

A dispatch from Anniston, Ala., states that the United States Car Co. will probably operate its plant to its full capacity on an order for 500 cars which has been received from the Wheeling & Lake Erie Company.

The Elliott Car Works, of Gadsden, Ala., is reported to have secured the contract for 500 cars wanted by the Seaboard Air Line and referred to in the Manufacturers' Record several weeks ago. This will make orders for 1000 cars alone awarded to two Southern plants within a short period.

The Texas Coast Canal.

A dispatch from Galveston, Texas, states that George H. Wreford, formerly of Dallas, Texas, and Charles T. Newcomb, of Hagerstown, Ind., have contracted to open the proposed canal along the coast of the Gulf of Mexico to Corpus Christi for \$1,100,000. This contract, it is stated, has been let to Charles H. Hubbell and Timothy E. Tarsney. It is claimed the latter represent a company in Detroit, Mich.

A Canal Company's Enterprise.

A dispatch from Georgia states that the Suwanee Canal Co. has been so successful in its enterprise that it has determined to extend its railroad now in operation to the Satilla river, twenty-five miles. The company, which is composed principally of parties from Atlanta, has an extensive tract of valuable land in the Okefenokee swam, in South Georgia, much of which is covered with hardwood timber. A canal has been cut and a large area of the swamp land drained. The timber is being cut and sent to the seacoast at Fernandina by the canal and a railroad twelve miles long extending from Camp Cornelia to Falkston, Ga. By extending the road as proposed, the company can haul its timber to South Brunswick, at the mouth of the Satilla, and there load it on vessels for the North. A line of towboats will be used on the Satilla river to carry the lumber to its mouth. Mr. Henry R. Jackson, of Atlanta, is president of the company, and S. T. Walker, superintendent.

Improvements at Port Arthur.

Mr. F. C. Henderson, general manager of the Missouri, Kansas & Texas Trust Co., writes as follows relative to the development at Port Arthur, on Sabine Lake, which is to be the tidewater terminus of the Kansas City, Pittsburg & Gulf system:

"There are several buildings now in the course of construction. I am advised from Kansas City that the work of building the railroad shops and roundhouse will begin within the next two weeks. The company has purchased a pile-driving boat, and is now taking borings of Sabine Lake. As soon as this is completed and plans are made by Mr. Robert Gillham, the chief engineer of the Kansas City, Pittsburg & Gulf Railroad, and they have been endorsed by the Secretary of War, the dredging of the channel will begin. The plans contemplate a channel

200 feet wide and twenty-five feet deep, to cost in the neighborhood of \$400,000. These details may require sixty days to complete.

"Following this the construction of the docks will commence, and will be completed with the canal. I have applications to locate the following industries at Port Arthur: A rice mill, a car works, a flour mill, a sash, door and blind factory, a stove factory and several other smaller concerns. We expect to locate these when the plans of the channel have been completed and the docks and terminal plans are thoroughly laid out.

"It is our intention to locate them on such a systematic plan as to reduce the handling of their products to the very lowest possible point. The present price of handling products in the Northwest leaves nothing for the farmer after paying the exorbitant freight charges and for the many transfers which are necessary to get it to its ultimate market. It is with this in view that the Kansas City, Pittsburg & Gulf Railroad has been built and that this system of docks and terminals is being laid out at Port Arthur, and the saving alone of terminal charges and rehandling will be quite an item. These plans will be completed as fast as it is consistent with good business policy.

"Concerning the land adjoining Port Arthur, will say that we have about completed the survey of the 42,000 acres. We have taken the elevation every 100 feet across the entire tract, and we have subdivided it so as to give every 20-acre tract a frontage on a graded road, and we are preparing to put in a thorough system of drainage."

Improvements at Port Chalmette.

In addition to the compresses and warehouses already erected at Port Chalmette, La., the terminus of the New Orleans & Western, a dispatch from New Orleans states that the largest compress in the world is to be placed at that point. It will be a 4000-ton press, of a capacity to handle 2200 bales of cotton daily. It will give a bale a density of fifty-five pounds per cubic foot—a remarkable pressure. It is being built by De La Vergne & Co., and is to be ready for work by May 1.

In addition to this, work is about to begin on a large hotel, several more warehouses and an extension to the wharf. A. W. Swanitz is chief engineer.

Improvements to Bay Line Steamers.

The Baltimore Steam Packet Co. is making extensive improvements to its steamers, and has just completed this work on the Alabama. Although she is practically a new vessel, the company decided to refurnish her and make other betterments. Expense was not spared, and it is safe to say that there are few vessels in the coastwise or transatlantic service that are more luxuriously furnished and appointed than the Alabama. Many of the carpets in the staterooms are Axminster, while the carpets and hangings in the saloons are of the choicest patterns. The prevailing colors, white and gold, which were originally used to decorate the saloon and cabin interiors, were utilized in the redecoration with very artistic effects.

The Alabama is a Southern craft from keel to pilot-house. She was constructed by the Maryland Steel Co. at Sparrow's Point, Md. This boat has triple-expansion engines using four cylinders—a form of construction adapted to balance the weight and power with the view to having a steamer void of vibration. It has four boilers, with all the latest improvements; steam reversing engines, steam feed pumps, donkey pumps for salt and fresh water service throughout, one pow-

erful steam pump to be used in case of fire or leakage, double engines for working freight elevators, double engines for working steering gear, double engine for working windlass, double engines for working capstans, and a powerful search-light of 16,000 candle-power, run by independent engines and independent dynamo. The hull is steel throughout, without a particle of iron in it, and was built under the rules of the United States Standard Ship-builders and Underwriters' Association. The Alabama is classed as A1 by marine insurance men. She is of nearly 2,000 tons.

The Baltimore Steam Packet Co. is closely allied with Southern interests, as it forms the Baltimore extension of the Seaboard Air Line. The officers of the Packet Company are Messrs. R. C. Hoffman, president; John R. Sherwood, general manager; Edward W. Thompson, traffic manager; R. L. Poor, general freight agent; Emmet Brown, general ticket agent, all of Baltimore.

Railroad Notes

The freight business of the Cincinnati Southern road, northbound, has nearly doubled within the last two weeks.

Mr. Joseph A. Werne has been appointed contracting agent of the Chesapeake & Ohio system at Louisville, Ky.

The Chesapeake & Ohio Company will operate its passenger trains to and from the Seventh street depot in Louisville, Ky.

The business men of Gladewater, Texas, have decided to build a steamboat to carry freight on the Brazos river from Gladewater to Sabine Pass.

The Seaboard Air Line is testing an invention of A. F. Kingsley, of Washington, for consuming smoke and gas from locomotives. The device forces the smoke and gas back into the fire-box.

The Austin & Northwestern Company has elected the following officers: Thos. H. Hubbard, of New York, president; A. N. Leitmaker, of Austin, vice-president and treasurer; J. P. Lawless, of Austin, secretary.

Mr. Harvey Middleton has been appointed superintendent of motive power on the Baltimore & Ohio system, succeeding Mr. George B. Hazlehurst. Mr. Middleton is from the Pullman Palace Car Co.'s plant at Pullman, Ill.

The shipment of oranges from California by way of the Southern Pacific and the Queen & Crescent roads has become so extensive that several hundred cars loaded with the fruit have passed over this route since March 1.

The Baltimore Steam Packet Co. has issued a very attractive folder in orange and black containing descriptions of resorts reached by this line and the Seaboard Air Line. It is illustrated with views of the steamers in the fleet.

The Gulf, Beaumont & Kansas City Company has elected the following officers: E. E. Pratt, president; John H. Kirby, vice-president and general manager; W. C. Averill, secretary and treasurer; N. D. Silsbee, assistant secretary and treasurer; Geo. D. Silsbee, second assistant secretary and treasurer.

At the recent convention of railway passenger agents at Richmond, Dana J. Flanders, of the Boston & Maine Railroad, was elected president; W. A. Turk, of the Southern Railroad, was elected vice-president, to succeed Mr. Flanders. A. J. Smith, of the Lake Shore & Michigan Southern, was re-elected secretary.

At the annual meeting of the Texas Street Railway Association officers were elected as follows: William H. Sinclair, Galveston, president; Carl F. Drake, Austin, vice-president; C. L. Wakefield,

Dallas, secretary. These, together with George P. Hendricks, of Fort Worth, and A. H. Hayward, of Houston, will constitute the directory. The association will next meet at Austin on the third Wednesday in March, 1897.

The Harlan & Hollingsworth Co., of Wilmington, Del., has completed for the Old Dominion Steamship Co. its new steamer, the Hampton Roads. She cost about \$75,000, and is a valuable acquisition to the company's present fleet. She has plenty of freight and passenger capacity, being licensed to carry 574 people. She is 165 feet long, thirty-one feet beam over all and of 450 tons. The Hampton Roads will be placed in service in the vicinity of Norfolk and Old Point.

The Congressional Express on the Philadelphia, Wilmington & Baltimore division of the Pennsylvania system has recently made a remarkably fast record. The thirty-five miles between Baltimore and Havre de Grace were covered in thirty-three minutes, and the run from Perryville to Gray's Ferry, fifty-six and one-half miles, in fifty-three minutes, including a stop at Wilmington. The time for the entire distance, ninety-two and one-half miles, was eighty-eight minutes. This is at the rate of over sixty miles an hour along a road on which are several grades.

The Manufacturers' Record acknowledges the receipt of a very attractive circular issued by General Passenger Agent W. A. Turk, of the Southern Railway, giving the itinerary of the excursion from the North through Baltimore to the Southern Baptist Convention to be held in Chattanooga from May 7 to May 14. The circular is illustrated with cuts of the scenery through Western Carolina, showing the attractions of this route. The rate announced is a round-trip ticket at half-rate, good for fifteen days from the date of sale and good for an extra fifteen days if deposited with the joint agent at Chattanooga immediately upon arrival. This circular will be mailed upon application to Mr. W. A. Turk, general passenger agent, Washington, or to Dr. O. F. Gregory, secretary of the Southern Baptist Convention, Baltimore.

On March 16, Mr. Chas. H. Sprout, secretary of Sprout, Waldron & Co., Muncy, Pa., died suddenly at Albany, N. Y. Mr. Sprout left home on March 10 apparently in perfect health, and while away was taken ill and grew rapidly worse until he passed away. In a wide circle of friends and business associates Mr. Sprout will be greatly missed.

The Bird-Eye Jellico Coal Co., successor to the Jellico Bird-Eye Coal Co. (mines at Halsey, Ky., on the Bird-Eye, Jellico & Northern Railroad, and seven and one-half miles from Jellico, Tenn.) is building quite a number of additional houses for its miners, and is driving entries, developing its three mines and rearranging tipples and handling appliances with a view of putting out 1000 to 1500 tons per day, its present capacity being about 400 tons. The mines of the company are conveniently located as to railroad facilities, both for Northern and Southern markets.

The Southern States magazine is read by thousands of farmers, fruit-growers, stock-raisers and business men in all the North, West and Northwest, who are looking to the South as a future home and are trying to inform themselves as to the relative advantages of different parts of the South. If you have farm, garden or orchard property for sale the Southern States will put you into communication with buyers. Send for sample copy and rates. Manufacturers' Record Publishing Co., Baltimore, Md.; Wm. H. Edmonds, editor and manager.

FINANCIAL NEWS.

New Corporations.

W. J. Roddey, Thomas S. Johnston and others are interested in forming a new loan association at Rock Hill, S. C.

The Farmers' Mutual Insurance Co., of Unionville, Mo., has been organized by J. N. Cook, William Hunter, C. E. Tice, E. J. Olinger, W. D. Lemen and others.

The bank to be opened at Biloxi, Miss., is to be called the People's Bank. It will have \$25,000 capital. C. F. Theobald and Charles Reddinger are interested in it.

The Nashville (Ark.) Building and Loan Association has been incorporated. The capital stock is \$500,000. The directors are J. S. Corn, D. P. Terry, H. N. and A. L. S. Killern.

The Commercial Bank at Newberry, S. C., has been organized by the election of the following officers: President, John M. Kinard; vice-president, D. O. B. Mayer; cashier, F. Z. Wilson.

The Security Building and Loan Association has been organized at Richmond with the following officers: President, Isaac B. Davenport; vice-president, John H. Montague; secretary and treasurer, W. A. Loving.

The Bankers and Builders' Loan Association has been organized at Charleston, S. C. The capital stock is \$150,000, divided into 1500 shares. The incorporators are L. M. Pinckney, Huger Sinkler and J. N. Nathans, Jr.

The People's Bank of Imboden, Mo., has been organized with capital stock \$25,000, all of which has been subscribed. The officers are as follows: W. C. Sloan, president; T. M. Duvall, vice-president; H. T. Sloan, cashier.

The Guarantee Loan Co. has been formed at Little Rock, Ark. The incorporators are D. F. Martin, Chas. W. Martin, J. C. Kerby, J. L. Kerby and R. L. Lunsford. The capital stock is \$10,000,000. Chas. W. Martin is president of the company.

Articles of incorporation have been filed by the Bay State Finance Co. of Kansas City, Mo. It has a paid-up capital stock of \$15,000. The stockholders are W. Eugene Parker, Edward G. Reynolds and R. L. Read. The company will do a real estate, mortgage and loan business.

The Dime Savings Bank has been formed at Richmond, Va., with \$100,000 capital. The officers for the first year are: Howard Swineford, president; S. G. Fairbank, vice-president, with L. F. Sullivan, Chas. D. Larus, F. W. Danner, A. C. Becker and Charles Lorraine, directors.

The Baltimore County Trust Co. has been formed with Lewis M. Bacon, Thos. J. Williams, Henry C. Matthews, Thos. H. Ridgely and Thomas J. Miller as incorporators. The capital stock is put at \$100,000, to be increased at will to \$1,000,000. The office will probably be in Baltimore.

New Securities.

The town of Moultrie, Ga., will issue \$5000 in 8 per cent. building bonds.

The city of Carrollton, Ga., has decided to issue \$15,000 in bonds for building a schoolhouse. The mayor may be addressed.

A bill is pending in the Mississippi legislature to allow the city of Vicksburg issue bonds for building purposes. The mayor may be addressed.

The Campbell-Zell Co., of Baltimore, has filed a certificate of the issue of \$50,000 of preferred stock. The stock is to bear 6 per cent. interest.

A bill is now pending in the Mississippi legislature to issue \$350,000 5 per cent. bonds for refunding purposes. Power is

given the board of levee commissioners to issue these bonds.

The Georgetown & Tennallytown Electric Railway Co., of Georgetown, D. C., will issue \$30,000 worth of 6 per cent. bonds. The American Trust & Security Co. will be trustee. Oscar T. Crosby is president.

Interest and Dividends.

The Oconee Brewing Co., of Macon, Ga., has declared a semi-annual dividend of 3 per cent., or \$6000.

The Louisville Railway Co. has declared a dividend of 2½ per cent. on preferred and 1¼ per cent. on common stock.

The Equitable Building Association, of Norfolk, Va., has declared an annual dividend of 15 per cent. in addition to earning a surplus of 5 per cent.

Financial Notes.

The Bank of Commerce at Summersville, S. C., has been reorganized with \$35,000 capital.

The State Bank of Opelousas, La., has been reorganized and reopened with the following officers: E. M. Bouqui, president; T. S. Fontenot, vice-president; Fritz Deitline, cashier, and Jonas Jacob, assistant cashier.

The Tennessee Exposition.

The Tennessee Exposition Co. has decided to make a special effort to secure foreign exhibits, and to that end has addressed a letter to the principal foreign governments, of which the following is an abstract:

"The Tennessee Centennial Exposition Co. has the honor of extending to you and to your people a cordial invitation to participate with them in this exposition. It is the desire of the management to make this an occasion through which closer commercial relations may be cultivated between the people of the United States and those of other countries, and the management is pleased to assure you that every arrangement will be made looking to that end. In the matter of exhibits from other countries than the United States, arrangements will be made to enter the same free of duty, and no charge will be made for space in the exposition buildings."

An Important Canal Contract.

Mr. Walter B. Brooks, Jr., president of the Dismal Swamp Canal Co., of Baltimore, informs the Manufacturers' Record that the company has let the contract for reconstructing this canal to Patrick McManus, 505 Betz Building, Philadelphia. The contract covers the construction of a completed canal ready for business, with locks, dams, approaches, waste weirs, all necessary excavation, clearing, ditching, bridging, drains, wooden culverts and conduits. This work will extend over the whole route of the canal from a place on the Elizabeth, four miles from Norfolk, Va., to a place where the canal meets the Pasquotank river, near South Mills, N. C. There are to be ten "turnouts" provided. Each turnout is to be twenty feet wide on the bottom and at least 200 feet long, curving out at each end to make uniform connection with the banks. A feeder about three miles long is to be constructed to Lake Drummond. The total length of the canal is about twenty-two miles, the average width sixty feet and the depth ten feet.

Mr. W. S. Milne, in a letter to the Manufacturers' Record, states that he is looking for a location for a chair factory where he can obtain reasonable freight rates and hardwood timber. His address is Cleveland, Tenn.

TEXTILES.

[A complete record of new textile enterprises in the South will be found in the Construction Department.]

A Cotton King Talks.

Under the above heading the New York Times of Monday last publishes the following:

"Jerome Hill, of St. Louis, one of the interesting figures which have come out of poverty to affluence in the new South, is in the city to visit friends and incidentally to look after his cotton interests. Mr. Hill was at Appomattox with Lee. The story goes that when General Grant told his fallen foe that all who had horses might ride them home, the exigencies of the occasion suggested to Mr. Hill to put a liberal construction on that permission. He was afraid, so he borrowed a mule from General Grant's army and rode till he reached Memphis. There his cotton-commission business began, and when, some years later, he went to St. Louis and established a second home, he had gained a reputation throughout the South as the biggest cotton buyer in the country. Besides being credited with having handled more cotton from producers than any other commission dealer, he is the owner of several large plantations, and as he has made a lifetime study of cotton and the methods of handling it, he enjoys a vast measure of prestige as well as popularity among cotton men, and his opinion on matters affecting cotton is regarded with much interest throughout the South and Southwest.

"Long before the ground has been broken for the new cotton crop there is much speculation in the cotton markets of the world as to the probable extent of the next American yield. Asked for his estimate, Mr. Hill yesterday said to a reporter for the New York Times:

"You might as well ask me how high the high-water mark of the Mississippi river will be this spring. My guess, however, is that there will be an increase of about 10 per cent. in the planting, and that, under average conditions, there should be about 8,000,000 bales raised in the United States. Some talk about 9,000,000 bales, but there never has been more than 9,000,000 taken from the fields.

"But of more interest to cotton-growers now, as I view it, than the probable size of the next crop, or the extent to which planters will be influenced in this year's planting by the ruinously low prices at which last year's crop was marketed by them, is the matter of economical methods in handling cotton. I made a speech on this subject before the New England cotton millmen at Atlanta during the exposition—the only public speech I ever made, by the way, except a talk, from a rebel soldier's point of view, on Grant's death before the Grand Army at St. Louis. There, as on my plantations and elsewhere, I advocated the substitution of the round bale for the square bale, for the reasons that it saves \$3 or \$4 a bale in the cost of marketing, and would make the quality of cotton so much better that there would be a vast decrease in the quality of low-grade cotton in the market. As a direct result, the American cotton crop would net American producers and commission men a mighty sight more money, and there would be no repetition of last year's experiences, when European buyers made from \$50,000,000 to \$75,000,000 off American cotton bought at four and one-half and five cents a pound. New York instead of Liverpool ought to be the great cotton market of the world. With the revolution in the methods of handling cotton which the round bale would bring, there would be a

change of rules in the Cotton Exchanges of New York and New Orleans, and the vast quantity of low-grade cotton which now operates to depress prices to producers would be largely eliminated.

"I'll show you how it works now. There are at the present some twenty-two grades of cotton. Under the rules of the New York and New Orleans Cotton Exchanges a contract for future delivery is on a basis of middling, but a foot-note says: 'Subject to the rules of the Cotton Exchange,' and these rules require you to accept any delivery made to you on five minutes' notice.

"If these rules were changed so that a contract for a special grade would insure a delivery of that identical grade, cotton in New York never would have sold for less than eight cents.

"I am not waging any warfare on transactions in futures, but I do criticize rules which are applied to no other product and which injure the value of one of the most important products of this country. I don't hesitate to say that the cotton crop for the past ten years has been depreciated fully one-fourth by the unjust rules to which I refer. How many spinners come to New York to buy cotton? I don't know of any, and I should like to know what natural reasons there are for this condition, and, in fact, as I said before, why New York needn't be the great cotton market of the world."

Another 10,000-Spindle Mill for South Carolina.

The Grendel Mills, of Greenwood, S. C., which has been granted commission to organize, as already stated in this department, has elected officers as follows: D. A. P. Jordan, president and treasurer, and Messrs. D. A. P. Jordan, J. K. Durst, J. S. Bailey, Jas. L. Orr and W. W. Klugh, directors. They expect to begin work on the proposed mill about April 1, and have to have it in operation by January 1, 1897. An equipment will be installed at the start consisting of 10,000 spindles and complement.

A \$100,000 Cotton-Mill Addition at Knoxville.

The Knoxville Woolen Mills, of Knoxville, Tenn., has commenced work on the addition to its plant of a cotton mill of 5000 spindles. The building which is to accommodate the machinery will be 300x75 feet in size, and when equipped with machinery will represent an investment of about \$100,000. The company now gives employment to 600 operatives, and with the new plant will require 150 more. Mr. E. J. Sanford is president; R. D. Gettys, vice-president, and J. A. McKelway, secretary.

Textile Notes.

The D. W. Alderman Co., of Alcala, S. C., will erect a knitting mill for hosiery and a cotton mill this summer.

There is some talk of the formation of a cotton-mill company at Gainesville, Texas, and Mr. J. M. Lindsay is interested.

Messrs. S. T. Jones and W. S. McCauley are interested in a project for the erection of a cassimere mill at Sweetwater, Tenn., at a cost of from \$50,000 to \$75,000.

Mr. W. R. Kindly, of Mt. Pleasant, N. C., recently reported as to erect a cotton mill, will form a company to establish and operate same. The capital stock will be \$30,000.

The project for the erection of a cotton mill at Gloster, Miss., is being pushed by Mr. W. D. Caulfield. Correspondence from manufacturers of spindles and looms is invited.

A movement has been started at Barn-

well, S. C., for the erection of a cotton mill, and subscriptions for over \$20,000 worth of stock has been subscribed. A charter has been applied for.

A dispatch from Anderson, S. C., says that the stockholders of the Anderson Cotton Mills held a meeting last week, at which they decided to build an additional mill to their plant at a cost of \$250,000.

A company is being organized at Gloster, Miss., for the purpose of erecting a cotton mill. A plant of from 150 to 200 looms with a complement of spindles is proposed. Mr. W. D. Caulfield is interested in the matter, and can be addressed for information.

Mr. W. J. Boles, secretary of the Commercial Club, of Birmingham, Ala., is in receipt of a letter from a silk manufacturer who contemplates the establishment of a silk plant in Birmingham. A \$25,000 plant is proposed, and from 150 to 200 hands would be employed.

The Cedar Falls Manufacturing Co., of Cedar Falls, N. C., has completed building in which some new machinery will be placed. One hundred looms are now being installed, and sixty more will be added soon; also 200 gravity spindles. A plant is being placed to light the mill with electricity.

Messrs. J. B. Lee, S. J. Simpson, J. B. Cleveland, W. F. Smith, Jos. Walker and R. Z. Cates have applied for a charter for a cotton-mill company at Spartanburg, S. C. Mr. R. Z. Cates is the promoter of the enterprise, and expects to raise sufficient capital to ensure the erection of a 10,000-spindle mill.

Messrs. Carswell & Carswell, of Chattanooga, Tenn., contemplate the establishment of a mill for knitting women's medium grade hosiery, and are now investigating the business, obtaining estimates on the cost of different size plants. A small plant is in view, to be enlarged as experience dictated.

Plans and specifications of the buildings for the new Blue Springs Cotton Mills, of Oxford, Ala., have been prepared. The main building will be 173 feet long, fifty-three feet wide and two stories high. Mr. O. W. Cooper, president of the company, intends that work on the plant shall be commenced at once.

The officers and directors of the Athens Knitting Mills, at Athens, Ga., which were destroyed by fire last week, have decided to rebuild at once. The company will increase its capital stock from \$10,000 to \$25,000 and erect new buildings to be equipped with 100 machines. Mr. J. H. Dootson is president of the company.

The project for a cotton mill at Branchville, S. C., is progressing to success. A charter has been applied for with the following as incorporators: Messrs. Isaac Sauls, H. H. Jennings, T. M. Raysor, S. Dibble, B. H. Moss, F. M. Stokes, W. J. Fairley, C. F. Smoak, J. T. Pearlstone, P. C. Dukes, A. F. Cooner and A. C. Carter.

The Fairfield Cotton Mills, of Winnsboro, S. C., has let contract for the erection of its buildings to D. K. Cecil, of Salisbury, N. C. Brick-making will commence at once, and the buildings are to be completed by August 30 next, and soon after the equipment of machinery will be installed. Mr. J. M. Beatty is secretary and treasurer of the company.

J. W. Stafford & Sons and G. E. Hugelley, of Barnesville, Ga., have acquired the Barnesville Knitting Mill, at Barnesville, Ga., as stated last week. They will put the plant in operation with sixty hands as soon as a competent superintendent can be secured, with daily output of 200 dozen. G. E. Hugelley is president, and F. M. Stafford, secretary-treasurer.

The Victor Manufacturing Co., of Greer Depot, S. C., writes the Manufac-

turers' Record that it will not put in 20,000 spindles at the start, as has been reported, but is putting in a power plant and other accommodations so that the equipment can be increased readily to 20,000 during the fall or early in the coming year. The company will commence operations in a few weeks with 10,000 spindles.

Mr. John W. Arrington, treasurer of the Edna Cotton Mills, of Reidsville, N. C., writes that its final equipment will be 15,000 spindles, with a view to which the company is now erecting buildings of suitable size. The equipment the company is now making consists of 10,000 spindles and 300 looms. This company's plant is very complete, covering about eleven acres on the line of the Southern Railway, with all necessary buildings and machinery for manufacturing, and operatives' tenements.

The Riverside Cotton Mills, of Danville, Va., has purchased the improvements and rights of the Dan River Power Co., near Danville. The latter company has been arranging for the erection of a 10,000-spindle cotton mill on a water-power, and the purchasers will carry out these plans to completion. A branch railroad is now under construction to furnish transportation for the material, and the erection of the building will be commenced in the near future. The Riverside Company is now operating in its present plant 62,000 spindles.

Mr. W. S. Witham, of Atlanta, who has a record of having organized twenty banks in Georgia, all of which have been financially successful, has now turned his attention to cotton mills. In a letter to the Manufacturers' Record he says: "I am now trying to put up as many cotton mills as I have established banks, and when things assume a definite shape they will be reported to you. I am ready to lend capital and offer other advantages to cotton-mill people who wish co-operation. We can arrange means by which any good mill now running in an unsatisfactory locality can be removed to the cotton belt."

Messrs. Edmond Wright, treasurer, and S. N. Bourne, agent, of the Stark Mills, of Manchester, N. H., manufacturers of sheetings, shirtings, drills, etc., have been traveling throughout the South during the past week looking for the best location for the establishment of a large branch mill. The Stark Mills is an old-established New England plant, with an equipment of 80,000 spindles and 2200 looms, giving employment to 1800 hands. It is stated that the company will establish this proposed plant in order to maintain and extend its trade, and some point where the staple and fuel can be obtained cheaply will be chosen.

The Brookside Cotton Mills, at Knoxville, Tenn., has completed the expensive additions which have been in progress to its plant for some months past. The new buildings have cost altogether about \$60,000, and consist of boiler-house 65x66 feet, engine-room 50x75 feet, picking department 75x75 feet and weaving department 120x380 feet, the two first-named buildings being one story high and the two last two stories high. The equipment of machinery is all of the latest improved patterns, and has cost in the aggregate about \$100,000. The entire plant will be in operation by April 1, employing over 500 hands, of whom over 250 will be necessitated by the additions.

At the annual meeting of the Florida Ice Manufacturers' Association the following officers were elected: President, E. W. Codington, Bartow; vice-president, Guy R. Pride, Jacksonville; secretary and treasurer, L. C. Canova, Palatka.

COTTONSEED OIL.

This department is open for the full and free discussion of trade topics and practical questions, and contributions are invited from men who are identified with this industry. Items of news are always acceptable.

The Market for Cottonseed Products.

New York, March 24.

No improvement may be chronicled in the cotton-oil situation. At this writing the indications of increased hog supplies at the West have imparted weakness to oil, while prospective purchasers are awaiting developments. Owing to this fact, trading has been of a desultory character, in the majority of instances holders refusing to shade current figures. The pressing requirements of Western packers effected a moderate demand for bulk crude and yellow oils during the week. A market feature, which stands out prominently, consists in the fact that local holders are a unit in rejecting propositions not on a parity with the prices quoted hereafter, notwithstanding the unfavorable attitude of animal products. March lard in Chicago is quoted at 5.15 cents, with May and July options selling at 5.30 and 5.45 cents respectively; cheerless figures truly for prospective cotton-oil distribution. It would appear, however, that bottom figures have been touched, and with a slackening of hog supplies a reactionary movement will obtain, proving beneficial alike to all the allied products. Not the least interesting market feature consists in the diminishment of arrivals, which are comparatively insignificant, while making clear the fact pressure to release stocks is not a contending factor in the situation. For prime crude, bulk, 17 cents at Southeastern points would prove an active trading basis viewed from a purchasing standpoint. Latest cable dispatches from England announce that prices tend slightly in buyers' favor, but owing to the small quantity of seed to arrive within the next few weeks an advance in prices is assured. The private advices which your correspondent is in receipt of from Leghorn and Genoa announce the important fact that the position of the olive oil market has materially changed during the past few weeks in consequence of a large portion of the crop having been spoiled at the last moment by wind and frost, all edible grades having advanced in value, while maintaining a decidedly upward tendency. An increased demand for refined cotton oil will follow as a natural sequence, as current prices will not prove a barrier to active trading, regardless of English-made oil. Rotterdam reports cotton oil dull, choice quality being quoted at 25f.; a fairly good demand obtains for off oil, a scarcity of which prevails. The interest evinced by exporters unmistakably indicates that by certain price concessions stock release-ments of cotton oil on a large scale would be among the important trade happenings of the immediate future. Sales of prime yellow transacted during the week have been on a basis of 25¼ cents, and 21 cents for barreled crude. Subjoined are the closing prices: Barreled crude, 21 cents; prime summer yellow, 25¼ to 26 cents; butter oil, 27 to 28 cents; off yellow grade, 25½ cents; white oil, 27 to 28 cents, and soap stock 1 to 1½ cents per pound. Bulk crude at the mills is quoted 17 to 18½ cents.

Cake and Meal.—The market is firm at unchanged quotations. Liverpool importers offer choice soft American cake at 45 to 45 6s. 3d. per ton, the English undecorticated variety being quoted at £3 10s. A light volume of exports is reported for the week, but the home demand, especially in the interior, is satis-

factory. Receipts at the Eastern markets are limited to eighty tons of meal at Boston.

Cottonseed-Oil Notes.

It is stated that a cotton gin of the latest improved pattern will be put in the Chattanooga Cotton Oil Mill at Chattanooga, Tenn.

The cottonseed-oil mills in Raleigh, N. C., have shut down for the season, owing to the great scarcity of seed. Unusually they run until May.

The Interstate Cottonseed Oil Co., of Augusta, Ga., has decided on the purchase of three acres of land in that city. The price to be paid is \$700.

The Landa Cotton Oil Co., of New Braunfels, Texas, closed its season on the 14th inst. after a most successful and continuous run of six and one-half months, having crushed an average of eighty-five tons per day.

In Houston, Texas, choice crude cottonseed oil for butter oil and strictly prime crude are steady at 17½ cents; prime crude, 17 to 17½ cents; prime butter oil in barrels, 26 cents, and prime summer yellow, 19 to 20 cents. Cottonseed oil-cake and meal f. o. b. at interior points are quoted at \$13 to \$14.50 per short ton; linters—A, Houston delivery and classification, 3 to 3½ cents per pound; B, 2½ cents per pound. The market closed quiet.

The Hope Oil Mills, Compress & Manufacturing Co., of Aberdeen, Miss., whose compress was burned last fall, will commence the erection at once of a much larger compress. The contract has been awarded to the S. J. Webb Co. (limited), of Minden, La., and the entire plant is to be completed on July 1. In the reorganization of the Hope Oil Mills, Compress & Manufacturing Co. all the old officers were re-elected: Morris Stern, president; C. R. Sykes, vice-president; James M. Acker, secretary, and D. H. McQuiston, treasurer.

The market in New Orleans for cottonseed products is unchanged. Meal and cake are firm at \$17 per short ton. Oil is dull—prime crude in bulk 18 cents, prime summer yellow in barrels 24 cents. Receivers' prices are quoted as follows: Cottonseed, \$9 per ton of 2000 pounds net to the mills, no commission of any kind to be added; cottonseed meal jobbing at depot, \$17.25 to \$17.50 per short ton of 2000 pounds; for export, per long ton of 2240 pounds, f. o. b., \$18.75 to \$19 for current month; oilcake for export, \$18.75 to \$19 per long ton f. o. b.; crude cottonseed oil (at wholesale or for shipment), strictly prime, in barrels, per gallon, 19½ to 20 cents; loose, per gallon, 16 to 18 cents, according to location of mill; refined cottonseed oil, prime, in barrels, per gallon, at wholesale or for shipment, 24 to 25 cents; cottonseed hulls, delivered, per 100 pounds, according to location of mill, 20 cents; foots, 1 to 1½ cents; linters—according to style and staple and irrespective of color, A, 4 cents; B, 3½ to 3¾ cents; C, 3 cents; ashes, none.

Telegraph in Texas.

A dispatch from San Antonio, Texas, states that the Postal Telegraph Cable Co., of Texas, has been incorporated with \$1,000,000 capital. J. H. McLeary and R. W. Strayton, of San Antonio, and A. C. Russell, of Massachusetts, are among the incorporators. It is understood that this is not the Postal Telegraph Co. of New York, which, as reported in the Manufacturers' Record some time ago, examined the State with the view of extending its system there. Most of the directors of this concern are said to be New England parties.

PHOSPHATES.

Phosphate Markets.

Office Manufacturers' Record,
Baltimore, Md., March 26.

The local phosphate market still shows a quiet and inactive tone, and the demand from manufacturers and others is exceedingly light. Fertilizer men are fully supplied at the moment, and are not buying, except in special cases. The advices from points of production are similar to those previously reported. In South Carolina the market is steady, with a fair demand from domestic ports and a light foreign inquiry. Crude rock is quoted \$3 at the mines; hot-air-dried \$3.25 f. o. b. Ashley river, and \$3.45 f. o. b. Charleston. Shipments of rock from Florida ports for the present month will be greater than those of February, and the market is nominally steady. Florida pebble is quoted 8½ to 9 cents a unit, delivered at Eastern ports. The schooner C. S. Glidden arrived during the week from Port Tampa with 1750 tons of phosphate. There are no charters reported in the local market. In New York the demand for sail tonnage has been moderate during the week, and berth freights are dull, with rates unchanged. The phosphate charters reported are as follows: A schooner from New York to Chester-town, Md., with fertilizer at \$1.50; a British steamer, 1342 tons, Sicily to Norfolk or Baltimore with sulphur at 11; a British steamer, 1253 tons, from Fernandina to Hamburg with phosphate at 14; a schooner, 680 tons, from Fernandina to Baltimore with phosphate at \$1.70, free wharfage; a British steamer, 1046 tons, from Tampa to Stettin with phosphate at 17; a British steamer, 1261 tons, from Brunswick to the Continent with phosphate at or about 13/6; a British steamer, 1235 tons, from Port Royal to Dublin with phosphate at 13/4, and a schooner from Philadelphia to Norfolk with phosphate at 80 cents.

Fertilizer Ingredients.

The market for ammoniates has ruled active and firm during the past week, with a good demand. There is a better inquiry from Southern ports, and considerable business is reported from that section. Stocks of blood and tankage in the West are light, and the market is firm. Nitrate of soda is quiet, with a good supply and prices steady. Large sales of potash salts for forward delivery at Southern points are reported.

The following table represents the prices current at this date:

Sulphate of ammonia, gas....	\$2 40¢	—
Sulphate of ammonia, bone....	2 25¢	2 30
Nitrate of soda.....	1 75¢	1 80
Hoof meal.....	1 70¢	—
Blood (beef).....	1 80¢	—
Azotine (beef).....	1 70¢	—
Azotine (pork).....	1 75¢	—
Tankage (concentrated).....	1 70¢	—
Tankage (9 and 20).....	1 70 and 10	—
Tankage (7 and 30).....	17 00¢	17 50
Fish (dry).....	20 50¢	—
Fish (acid).....	12 00¢	—

Phosphate and Fertilizer Notes.

The shipments of phosphate rock from the Tennessee mines for the month of February amounted to 3740 tons, production 3550 tons and stocks on hand March 1, 3900 tons.

The schooner Blanche Hopkins sailed from Fernandina, Fla., on the 21st for Baltimore with 573 tons of soft phosphate and 292 tons of phosphate rock. The schooner Isaiah Hart sailed on the same date for Philadelphia with 1260 tons of pebble phosphate.

The British steamship Dunmore Head cleared from Fernandina last week with a cargo of phosphate rock for Dantzic. The British steamer Ratcliffe arrived from Teneriffe, and the steamship Beresford from Los Palmas, and will take cargoes of phosphate.

It is stated that the Louisville & Nashville Railroad has a corps of engineers locating a route for a line to develop the deposits of phosphate on Leatherwood creek, Tenn. They are said to compare favorably with the Swan Creek phosphates.

Some fine specimens of kaolin clay have been received at Macon, Ga., from Mr. Van Buren, of Griswoldville, who has an unlimited supply of fine quality on his property. Samples have been sent to leading chemists of the United States, who pronounce them of the very finest quality.

Governor Evans, of South Carolina, returned to Columbia last week from Florida, where, in company with Phosphate Inspector Jones, he has been inspecting the phosphate mines. Their object in visiting the mines of Florida was to compare the methods of mining with those in South Carolina and secure ideas regarding mines and mining.

The schooner Carrie A. Lane sailed from Port Tampa, Fla., on the 16th inst. for Cartaret, N. J., with 1260 tons of pebble phosphate from the Terraccia phosphate Co. The schooner R. W. Hopkins arrived on the same date from Cienfuegos and loaded a cargo of phosphate. The schooner John K. Souther sailed on the 19th for Cartaret, N. J., with 323 tons of phosphate from the Bradley Phosphate Co. and 1156 tons from the Bone Valley Phosphate Co.

The shipments of phosphate rock from the port of Charleston for the week ending the 21st inst. were as follows: Schooner Tillie Vanderheulen for Richmond, Va., with 600 tons; schooner Isaac T. Campbell for Weymouth, Mass., with 825 tons, and schooners S. B. Marts with 800 tons, and Lida J. Lewis with 810 tons, both for Baltimore. The total shipments of phosphate rock to domestic ports since September 1 amount to 65,942 tons, against 47,766 tons for the corresponding period last year.

The Indiana and the Texas.

A correspondent of the Philadelphia Times says the guns of the battleship Indiana, the "pride of our navy," are too heavy for her, and that the big ship is a disappointment, and is unsatisfactory. The same writer further states that on the Indiana's recent trial trip the firing of the heavy guns in the upper turret almost blew off the head of a gunner's mate, who was in the sighting tower of the main turret, and that it was found impossible to operate the 13-inch guns in a broadside, because the shock of the discharge would unsettle, if it did not entirely wreck, the upper turrets.

Truly, these statements are in striking contrast with the tremendous pulling the Indiana has received from the Northern press ever since she was launched. We do not wish the "pride of our navy" any harm, and sincerely hope that the defects she has developed may be speedily remedied. Yet we would suggest that until that work shall have been accomplished, it might be well for our Northern contemporaries to stop "picking" at the poor little Texas, because she was constructed at the Norfolk navy-yard and her engines were built in Richmond, and because she did not do what no other battleship has ever yet done, and that is, make a perfect showing as to machinery from the beginning. If the half of what the Philadelphia Times's correspondent says regarding the Indiana is to be relied upon, her defects are infinitely greater and infinitely more serious than those of the Texas, and the latter would today prove in an engagement much more effective than her big sister, built in a Philadelphia ship-yard.—Richmond Dispatch.

MECHANICAL.

Contractor's Elevator.

In handling material employed in the construction of high stone and brick buildings new requirements are developed which call for improved machinery. The multiplication of this class of buildings has worked a complete change in contractors' methods. One of the important adjuncts is an effective and reliable hoisting equipment. We illustrate a plant which is being introduced by the John F. Byers Machine Co., Ravenna, Ohio. It is a double-platform elevator, with stiff guides, simple in construction and designed to handle

Rails are spliced as shown by clamp D, in section of T rail E.

The rail is extended through mortise in the head-block and is tightened by I bolt F, clamped to rail and drawn through the head of elevator and fastened by a nut.

Clamp H is used to secure and brace the rail at each floor, overcoming the swinging motion experienced with rope guides and enabling the unloading of material at any landing.

The elevators are light in weight, yet strong and durable. In case of breakage a mechanic can replace any part in a short time.

The elevators are easily set up and can be changed from floor to floor very

face and the wear on the hoisting line is less than on an all-iron sheave.

The sheaves are so constructed that they can be instantly released from the shaft when the drum is needed for heavy work, and it is not necessary to remove the lines when changing from one class of work to the other.

The engines complete with boiler weigh about 3000 pounds, are very compact and easy to handle, and will hoist 2000 pounds single line on the drum 100 feet per minute, and will operate the elevators with a wheelbarrow load of brick or mortar at a speed of 400 to 500 feet per minute.

Forsyth's Seamless and Elastic Centre Belting.

The Forsyth patent seamless elastic centre belting is manufactured by a patented and improved process that is said to prevent all possible defects to which the heretofore established methods are subject. The following illustrations show the several methods in common practice and the new improved process.

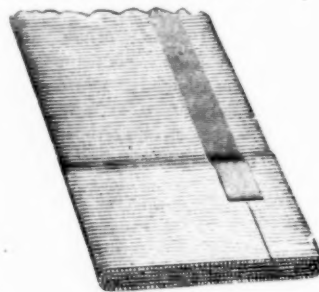


FIG. 1.

Fig. 1 represents a belt made from duck, with the usual frictioned rubber coating on both sides, the outer covering being butted as shown, and a light "seam" of pure rubber applied to hold together this butt joint, which is the weakest part to lateral strain, then the whole is vulcanized under pressure.

This seam, it is said, is more liable to abrade when applied to a butt joint of this kind of belting than to others, giving the belt an objectionable appearance, though doing but little practical harm.

The lower part of cut shows belt before being pressed and vulcanized; the upper part shows belt after being pressed and vulcanized.

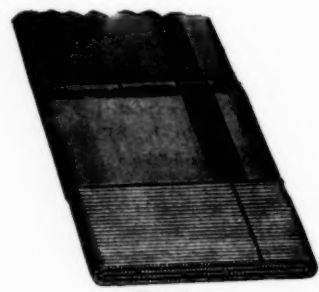


FIG. 2.

Fig. 2 represents the "regular" rubber belting with seam. The inside plies of this are made from frictioned duck, as before described, but the outside ply has received, on its outer surface, an extra coating of rubber applied by heated calendar rollers, which is the best uniting process. This ply is then wrapped over the inner plies, butted as shown and the seam applied, then vulcanized under pressure. While, it is stated, this seam has a lateral tendency to open, it is more secure than Fig. 1.

The lower part of cut shows belt before being pressed and vulcanized; the upper part shows belt after being pressed and vulcanized.

Fig. 3 represents "seamless" rubber belting. It is made from frictioned duck, with an outside covering folded around the frictioned centre, passing over the butted joint, lapped as shown, and then vulcanized under pressure. The strength

of this covering at the frictioned butt joint is no greater than Fig. 2.

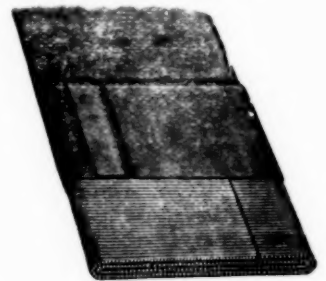


FIG. 3.

The lower part of cut shows belt before being pressed and vulcanized; the upper part shows belt after being pressed and vulcanized.

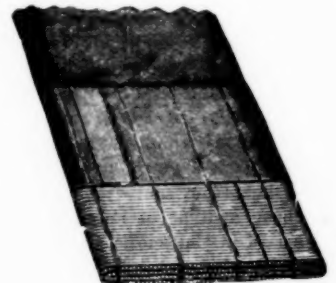


FIG. 4.

Fig. 4 represents a "stitched seamless" rubber belt. It is made the same as No. 3, except that previous to folding on the outer rubber covering it is stitched as shown.

The lower part of cut shows belt before being pressed and vulcanized; the upper part shows belt after being pressed and vulcanized.

Figs. 5 and 6 represent the new patented method for making seamless and elastic centre belting.

In making a "regular" two-ply belt the duck is frictioned on both sides, then a heavy coating of rubber is applied to one side by means of heated calendar rollers, making a perfect union. Thus prepared, strips are cut and folded, a seam of pure rubber applied for holding the butts together, then the whole is vulcanized.

The use of heated calendar rollers being the most perfect process for uniting the thicker rubber coating to the frictioned duck, it is used in making these patent belts.



FIG. 5.

In making a four-ply (Fig. 5), two two-ply belts are first made with the butt joints placed on opposite sides from the centre of the belt, all seam strips are dispensed with, the two butted surfaces are placed together, and the whole is then vulcanized under great pressure.

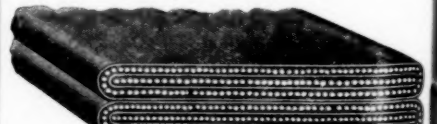


FIG. 6.

Six-ply belts (Fig. 6) are made in a similar manner by uniting two three-ply belts. In the Forsyth patent seamless and elastic centre belting, which is manufactured by the Boston Belting Co., Boston and New York, with branch houses in all the large cities, no outside seam can possibly be found to open up, and it is said to be especially well adapted for hard and severe work.

It is reported that the New York Gas Coal Co. has purchased the coal mines near Egypt, N. C., owned by the Henzley-Langdon Mining Co.



CONTRACTOR'S ELEVATOR.

material in a safe, quick and economical manner.

The illustration shows this elevator as set up. The platforms are made of wood, well braced with iron. The base and head of the elevator are of solid oak. The head M, which is mortised to receive same, is supported by three triangular legs. Guides are made of special T rail in lengths of fifteen feet each, and weigh twenty-two pounds to the length. Bolted to the side of the cages is the guide plate A, which slides smoothly on the T rail, and holds the cages in position. The base N is mortised to receive the rail, which is held in position by nut and washer B, one each of which are placed on the rail above and under the base and tightened by set-screw C.

quickly.

A three-eighths-inch 6x19 crucible steel hoisting line is furnished with each elevator.

Elevators are furnished with wire guides when desired.

A double-cylinder reversible-link-motion hoisting engine is designed and built by this firm especially for running these elevators.

On the gear side of the drum-shaft of these engines is placed a wood-filled sheave for running double-platform elevators, for handling brick and mortar, while the drum can be used for hoisting stone and other heavy material.

This wood-filled sheave has a concave surface for the elevator rope; the friction of the rope is greater on the wood sur-

New Water Heater and Pump.

A new machine which embodies the results of considerable experiment is illustrated herewith. It is the Moffatt combined boiler-feed pump and heater, with adjustable-stroke double-acting pump.

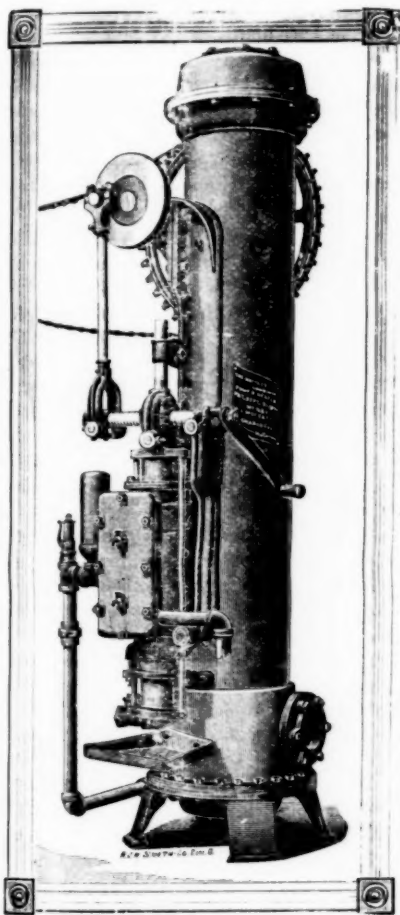
Good engineers say that the most economical way to feed a steam boiler is by a pump driven by belt. But before full benefits of this mode of feeding can be had the pump must, it is said, be adjustable in its feeding capacity. The advantages gained by the adjustable pump are, first, the engineer can set his pump to handle just the amount of water needed to keep proper supply in his boiler, and by being able to do this the water is allowed to remain in the heater the longest possible time and yet reach the boiler as soon as needed. The longer the feed water can remain in the heater the higher the temperature will be, and every degree of heat that can be added to feed water before

The heater, as will be seen from accompanying cut, is a straight-tube heater. The tubes are attached to the shell at lower end and not attached at the upper end, being independent to expand and contract without any strain; for this reason will, it is said, never cause the tubes to become loose and leak at the heads. Then again, it is seldom that a heater can be used for any length of time without scale forming on the tubes. In this heater the cap, as will be seen from cut, can be easily removed and the tubes thoroughly cleaned out. The chamber under tubes is provided with blow-off, so that mud or other collections can be blown out as they accumulate. The area inside of heater in one and one-half times that of the exhaust opening; so there can in no case be any back pressure on engine.

This machine is built in sizes ranging from sixty to 1000 horse-power, inclusive. Another style, built in sizes ranging from fifteen to fifty horse-power, inclusive, is identical in principle to the large machines, except that the pump is single instead of double acting. This machine is designed to do the same for the small

ment is made between the hand-wheel and the back and forward screw. Placed in the nearest position to the hand-wheel, engagement is made between the hand-wheel and the up and down screw. If again the key is placed in a central position, the hand-wheel is free to move without affecting anything, and has the advantage that the work on the table once set, and the key in the central position, accidental touching of the hand-wheel cannot throw the work out of adjustment.

The bolts have three-eighths-inch holes drilled in the heads, so that a three-eighths-inch rod is all that is needed to tighten up with, doing away with wrenches, which are either the wrong size or on some one else's machine when wanted. The front spindle bearing is the regular conical taper, with adjustment for taking up wear. The regular friction feed is used, with adjustments for regulating the amount of friction. The back-gear machine has six speeds, and the without back gear four speeds. Extreme care is taken to make these machines as near perfect as possible, and only the best material is used.



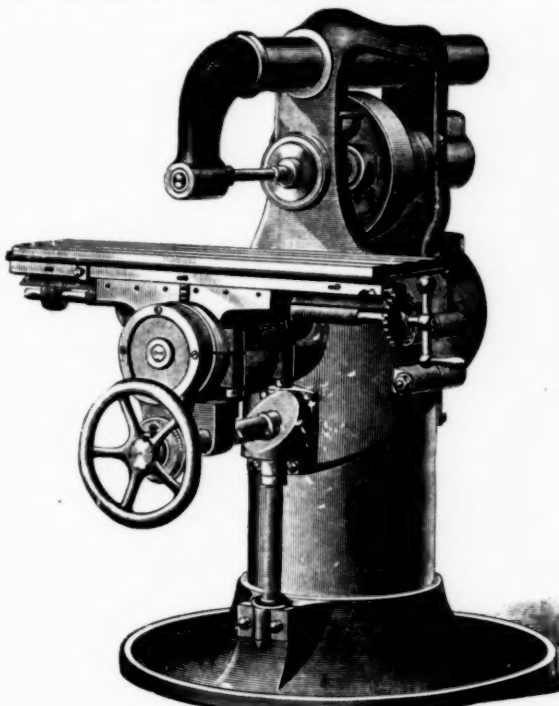
NEW WATER HEATER AND PUMP.

entering boiler just means so much fuel saved, as well as increasing the steam capacity of the plant.

This pump, because it is driven with steel sprocket belt, is positive in its movement and cannot, it is claimed, lose by the belt slipping. Owing to the way this pump is constructed, the power necessary to drive it always corresponds exactly with the amount of water needed.

The pump is of the plunger style, outside packed, which is claimed to be the simplest possible form of pump. If there are any leaks an inexperienced hand can see it and pack same. The valves are swing brass valves with flat seats and coil springs; by removing one cap all the four valves are gotten at on both sides.

This combined machine has the pump made on to the heater, so that when heater is set up the pump is also ready for work, and requires no piping from heater to pump. Thus it will be seen that a pump and heater will require no more room than either a pump or heater alone would, and on account of the two being made together the connections from pump to heater are already made when the machine is shipped out, and only needs to be connected from pump to tank and from heater to boiler.



THE FORBES PLAIN MILLER.

steam user which the large machine does for the large cotton mills and manufacturing establishments. The small steam user has given little thought to this matter of economy in cost of power, and this machine promises to become more popular as its advantages are better understood. The Park Manufacturing Co., Charlotte, N. C., is the manufacturer.

The Forbes Plain Miller.

We illustrate the plain miller made by W. D. Forbes & Co., Hoboken, N. J. This machine has a table feed of twenty-two and one-half inches, six-inch transverse movement and 12-inch extreme rise and fall, and is made both with and without back gear. The machine stands in the extreme sixty inches high, fifty-two inches wide (line of arm), forty-two inches thick (line of table), and weighs about 3000 pounds.

One of the noticeable features is a cylindrical column, which, it is claimed, gives the greatest stiffness for the same amount of metal used. Forbes & Co., whose class of work distinctively requires fine machining, have given these machines a thorough test, and now have four of them doing their work.

Another feature is the use of a key, moved by a thumb nut just back of the hand-wheel. When the key is moved farthest away from the hand-wheel, engage-

Iron Markets.

Cincinnati, Ohio, March 21.

It is too early to determine whether it is really a flood or only a heavy spring shower. It looks very much like a flood. The Alabama furnaces that have been trying to maintain prices in the face of adverse conditions, have recognized the situation, and on grades of which there has been an accumulation, have authorized prices to meet Northern and Eastern competition. This has resulted during the past week in the placing of a heavy tonnage, principally to consumers in the central districts. For several months past rolling mills have bought sparingly, but during this week have been very prominent in large transactions. If demand continues for a few days more, the Birmingham furnaces will have their order-books well filled for mill grades, and be in a much more independent position. There seems to be no regular schedule of prices. Each company is working on its own basis, and the market is therefore irregular. We believe that some of the large buyers have been able to cover their requirements during the next six months at prices that will net the furnaces very little if any above present cost. This buying movement has not extended very far East or West, but it is thought that its effects will be felt later. There has been no marked increase in demand for

foundry grades, and the rank and file of small buyers have not yet actively come into the market. Charcoal irons have been sold in about their usual proportions.

Collections are fairly good, considering the tightness of money in various sections of the country. Although failures in general lines of business are above the average, comparatively few iron-consuming concerns have failed.

We quote for cash f. o. b. cars Cincinnati:

Southern coke No. 1 foundry...	\$11 00	\$11 25
Southern coke No. 2 foundry...	10 25	10 50
No. 1 soft...	10 25	10 50
Lake Superior coke No. 1...	13 00	13 50
Lake Superior coke No. 2...	12 00	12 50
Hanging Rock charcoal No. 1...	10 00	17 00
Tennessee charcoal No. 1...	13 50	14 00
Jackson county silvery No. 1...	14 00	14 50
Southern coke, gray forge...	9 25	9 50
Southern coke, mottled...	9 00	9 25
Standard Alabama car-wheel...	15 75	16 25
Tennessee car-wheel...	14 50	15 00
Lake Sup. car-wheel & malle...	14 50	15 00

We quote for cash f. o. b. Philadelphia:

No. 1 X standard Alabama...	—	\$12 75
No. 2 X standard Alabama...	—	12 25
No. 1 X standard Virginia...	—	12 50
No. 2 X standard Virginia...	—	12 25
No. 1 X lake ore iron...	—	15 00
No. 2 X lake ore iron...	—	14 50
Lake Superior charcoal...	17 00	17 50
Standard Georgia charcoal...	17 50	18 00

New York, N. Y., March 21.

During the past week but little interest has been taken in the pig-iron market by consumers in this district, and few trades of importance have been closed. Reports from New England show a sharp check to business there. Some of the large foundries complain that competition is extremely severe, and that others are taking contracts at prices apparently less than cost. The money stringency is felt and interest rates are high. A trip through the Lehigh and Schuylkill Valleys shows that stocks of iron are still accumulating, although some heavy sales have been recently reported. The furnace men are realizing the disadvantages of dull demand, declining prices and advancing cost. These conditions will undoubtedly result in blowing out of furnaces and decrease in production. The large cast-iron-pipe companies are still melting heavily and have good prospects. The stringency of the money market is said to be as bad as in 1893.

We quote for cash f. o. b. docks:

No. 1 X standard Southern...	—	\$12 25
No. 1 X choice Virginia, such as Shenandoah...	—	12 75
No. 2 X Alabama or Virginia...	—	11 50
No. 1 soft Ala. or Virginia...	—	11 50
No. 1 X lake ore coke iron...	—	14 50
No. 2 X lake ore coke iron...	—	14 00
Lake Superior charcoal...	16 50	17 00

Chicago, Ill., March 21.

The market in general gets no better, and prices that ruled a week ago for Southern irons are being shaded.

The decline of the past week may prove to be the "last straw," and a healthy reaction may soon set in. There has been a fair inquiry, but, so far as we can judge, only a limited amount of trading.

Northern coke irons seem to remain firm at about recent quotations. Northern charcoal irons have stiffened up perceptibly, and we note an advance of practically fifty cents a ton from lowest prices for standard brands.

We quote f. o. b. Chicago as follows:

Lake Superior coke No. 1 fdy...	—	\$12 50
Lake Superior coke No. 2 fdy...	—	12 00
Lake Sup. charcoal, Nos. 1 to 6...	13 50	14 00
Ohio Scotch No. 1...	15 00	15 50
Jackson Co., O., silvery No. 1...	14 50	16 50
Alabama silvery No. 1...	—	12 85
Southern coke No. 1 foundry...	—	11 85
Southern coke No. 2...	11 35	11 50
Southern coke No. 3...	10 85	11 00
Southern coke No. 4...	11 35	11 50
Southern coke No. 2 8...	11 00	11 25
Mamie...	13 00	13 50

ROGERS, BROWN & CO.

The Standard Oil Co. has completed its oil storage and distributing plant at Wilmington, N. C. The oil will be carried to Wilmington in tank steamships and pumped from them into ten tanks, the largest of which holds 10,000 barrels. From these it will be placed in tank cars and barrels as required, and shipped to various parts of the South.

LUMBER.

[A complete record of new mills and building operations in the South will be found in the Construction Department.]

Lumber Directory.

Readers of the Manufacturers' Record who may be in the market for lumber of any description are recommended to the directory of Southern lumber manufacturers and dealers which appears among the advertising pages.

LUMBER MARKET REVIEWS.

Baltimore.

Office Manufacturers' Record,
Baltimore, Md., March 26.

There is no improvement to chronicle in the local lumber industry, and the market is quiet, with prices easy and stocks more than ample for the demand. Receipts of air-dried yellow pine have been very heavy during the past two weeks, and the outlook for quick returns and good profits to the shipper is not encouraging at the moment. Box factories and planing mills are buying small lots, and there is a better demand expected from builders, but the volume of business is light. In kiln-dried North Carolina pine there is a better volume of trade reported, the demand coming mostly from out of town. White-pine men report business very quiet, with no special inquiry from any source. Stocks are not excessive, but fully ample for all requirements. Cypress is dull, with prices steady. The hardwood business has been seriously affected by the general inclemency of the weather prevailing in Northern and Southern latitudes. The transportation of lumber and timber has been restricted, and as a consequence sales in the local market are light. There is some inquiry from out of town, but the demand is not urgent. Shippers report the export trade as rather dull, the market in Europe being reported lower. The large amount of material going forward has overstocked the market in Great Britain, and values have dropped. Commission men and manufacturers agree that with more settled weather the hardwood business will show more activity.

The following list represents the prices current at this date:

[The quotations for yellow pine are for cargo lots, and for all hardwoods the figures indicate values for choice car lots.]

VIRGINIA AND NORTH CAROLINA PINE	
5-4x10 No. 2, kiln dried.....	\$16 00@ 18 00
5-4x12 No. 2, kiln dried.....	17 50@ 18 50
4-4x10 No. 1, kiln dried.....	15 50@ 16 00
4-4x12 No. 1, kiln dried.....	16 00@ 17 00
4-4 edge, No. 1, kiln dried.....	13 00@ 14 00
4-4 wide edge, No. 1, kiln d'd.....	17 50@ 18 00
6-4x10 & 12, No. 1, kiln dried.....	23 00@ 24 00
4-4 No. 1 edge floor, air dried.....	13 50@ 14 50
4-4 No. 2 edge floor, air dried.....	10 50@ 11 50
4-4 No. 1 12-in. stock, air dried.....	14 50@ 15 50
4-4 No. 2 12-in. stock.....	12 50@ 13 50
4-4 edge box or rough wide.....	8 50@ 9 50
4-4 edge box do. (ord. widths).....	7 50@ 8 50
4-4 edge box do. (narrow).....	6 50@ 7 50
4-4 12-inch or rough wide.....	9 50@ 10 00
3/4 narrow edge.....	6 50@ 7 50
3/4 wide.....	7 50@ 8 50
3/4x10-inch.....	8 00@ 9 00
Small joists, 2 1/2-12, 14 and 16 long.....	8 50@ 9 00
Large joists, 3-16 long & up.....	9 00@ 10 00
Scantling, 2x3-16 and up.....	8 00@ 9 00

WHITE PINE.

1st and 2d clear, 4-4, 5-4, 6-4 & 8-4.....	48 50@ 50 50
3d clear, 4-4, 5-4, 6-4 and 8-4.....	43 50@ 44 50
Good edge culls.....	14 50@ 15 50
Good stock.....	16 50@ 17 50

CYPRESS.

4-4x6, No. 1.....	20 00@ 21 00
4-4x6, No. 2.....	14 00@ 15 00
4-4x6, 16 feet, fencing.....	12 50@ 13 50
4-4x6, rough.....	9 00@ 10 00
4-4 rough edge.....	9 50@ 10 00
4-4 edge, No. 1.....	18 50@ 19 50
4-4 edge, No. 2.....	12 00@ 13 00
Gulf, 4-4, Nos. 1 and 2.....	28 50@ 30 50
Gulf, 6-4, Nos. 1 and 2.....	31 50@ 32 50

HARDWOODS—WALNUT.

5-8, Nos. 1 and 2.....	65 00@ 75 00
4-4, Nos. 1 and 2.....	80 00@ 90 00
5-4, 6-4 and 8-4.....	85 00@ 95 00
Newell stuff, clear of heart.....	85 00@ 100 00
Culls.....	20 00@ 30 00

OAK.

Cabinet, white and red, Southern, plain-sawed and good, 1 and 2, 8 inches and up, 12 to 16 feet long, 4-4.....	30 00@ 34 00
Quartered white, Western, 1 and 2 quality, all figured, 6 inches and up wide, 4-4.....	53 00@ 55 00
Culls.....	10 00@ 15 00

POPLAR.

Nos. 1 and 2, 5-8.....	24 50@ 25 50
------------------------	--------------

Nos. 1 and 2, 4-4.....	28 00@ 30 00
Nos. 1 and 2, 6 and 8-4.....	32 50@ 33 50
Culls.....	13 00@ 16 00

SHINGLES.

Cypr., No. 1 h'rts, sawed, 6x20.....	7 25@ 7 75
No. 1 saps, sawed, 6x20.....	5 50@ 6 50
No. 1 hearts, shaved, 6x20.....	6 50@ 7 50
No. 1 saps, shaved, 6x20.....	5 25@ 5 50

LATHS.

White pine.....	2 70@ 2 75
Spruce.....	2 15@ 2 25
Cypress.....	2 15@ 2 25

Norfolk.

[From our own Correspondent.]
Norfolk, Va., March 24.

As the season advances the tone of the general lumber market does not acquire any decided activity, but the demand, however, may be called fairly active for certain grades and dimensions of lumber. Prices are in the main firm, and to some extent are hardening, and with a more pronounced demand they would likely show a higher range. Among manufacturers and commission men generally there is a very hopeful feeling that later on an increase in business will certainly develop. The mills at this point and throughout this section of the State are running regularly, and stocks are not excessive, but ample for the current inquiry. There is a fair inquiry for box lumber, and the demand for 10-inch and edge is quite active. Kiln-dried lumber of certain grades is selling fairly well, but air-dried is scarce, with prices, however, no higher. The value of exports for February is estimated at \$53,130, or \$46,140 for timber and \$6900 for lumber. The demand for building is better this season, and a large quantity of material is being purchased for the many improvements throughout the city and suburbs. Planing mills, box factories and all woodworking concerns are enjoying a fair amount of business at present, and are generally operating on full time. Among the improvements in milling sections may be mentioned the addition to the Surry Lumber Co.'s plant at Dendron, Va. The company proposes to go into the planing-mill business, ground having been broken last week for the mill to be erected. For the present only three planers and two resaws will be used, but the building will be large enough to afford room for additional machinery. The output of the extensive plant of the Surry Lumber Co. at Dendron will be handled as usual by Messrs. R. T. Waters & Son. Freights are steady, with no change in rates and a plentiful supply of tonnage. Rates to New York and sound ports are quoted \$2.25, and to Boston \$2.75 to \$3. The lumber charters reported in New York last week were as follows: A schooner, 219 tons, from Norfolk to New York, \$2.25; a schooner, 213 tons, from Norfolk to Beverley, \$3; a schooner, 465 tons, from Richmond to Perth Amboy with ties at 13 1/2 cents, and a schooner, 170 tons, from Norfolk to Boston, \$3.

Charleston.

[From our own Correspondent.]
Charleston, S. C., March 23.

The lumber market has ruled fairly active during the past week, and the demand seems to be more pronounced in character. At Georgetown and other milling points the mills are all busy, and there are a number of vessels now loading lumber at this and nearby ports. The cross-tie industry is now quite active, and shipments will likely be quite frequent during the spring and summer months. Prices for all desirable grades of lumber do not seem to show any appreciation, but are firm at quotations. The market closes steady at the following quotations: Merchantable lumber, \$14 to \$16 for city-sawed, \$12 to \$14 for railroad; square and sound, \$9 to \$13 for railroad, \$8 to \$11 for raft; dock timber, \$4.50 to \$6.50; shipping, \$8.50 to \$10.50. There is a good demand for shingles, and the market is firm, with stocks not excessive, at \$5 to \$7

per thousand. During the past week the following vessels sailed with cargoes of lumber: Schooner Georgetta Lawrence with 240,000 feet, and Clara E. Bergen with 350,000 feet; steamers Seminole with 83,000 feet, and Iroquois with 25,000 feet, all for New York. The barkentine Henry Norwell cleared for New York on Saturday with 323,000 feet of lumber, and schooner Mary S. Bradshaw for Philadelphia with 247,000 feet. The total shipments of lumber since September 1 amount to 38,341,144 feet to domestic ports and 1,530,685 feet foreign, making a total of 39,871,829 feet, against 35,896,413 for the corresponding period last year. Lumber freights are firm, with rates to New York at \$4.62 1/2 to \$5, and proportionately for ties. The following charters were reported last week in New York: A schooner, 385 tons, from Charleston to Perth Amboy with switch ties at \$3.75 per M, and a schooner, 120 tons, from Charleston to Providence with lumber at \$4.75.

Savannah.

[From our own Correspondent.]
Savannah, Ga., March 23.

All indications point to a very active lumber market here during the spring and summer months. The demand is very pronounced, and orders are coming in freely from Northern and Eastern ports, as well as from the West Indies and South America. At all Southern milling points in this State the industry shows a marked improvement and mills are all busy. The cypress trade is improving, and the demand for this wood increasing. For pitch-pine lumber prices are very firm, and the local market closes steady and unchanged at the following figures: Ordinary sizes, \$11 to \$12; difficult sizes, \$13 to \$18; flooring boards, \$15 to \$22; shipstuffs, \$16.50 to \$20, and sawn ties, \$10. At a meeting of the Atlantic Coast Cypress Association recently held in Savannah, Secretary E. J. Marsh stated that the stock of cypress lumber on hand in the yards of members of the association in Florida and along the Atlantic coast was probably 30,000,000 feet of all grades. Prices were also discussed, and a committee recommended an advance of fifty cents per thousand on cargo shipments delivered at all Atlantic ports, and an advance on rail shipments of \$1 per thousand based on delivery at Boston common points and according to the Louisiana weights and freight tariff sheet, which was adopted. The association and the Louisiana Cypress Association will in future work harmoniously together, in order more fully to demonstrate the utility of a thorough organization and its beneficial influence on the general market. The weekly shipments of lumber from this port are reported as follows: For Philadelphia, schooners A. D. Samson, 360,081 feet pitch-pine lumber, and John H. Platt, 271,097 feet of crossties and 179,000 feet pitch-pine lumber by Dixon, Mitchell & Wells, and 379,562 feet of crossties and lumber by the Georgia Lumber Co.; schooner Frederick Rossner for Warren, R. I., 326,657 feet of lumber; schooner Ida Lawrence for Baltimore, 360,081 feet of lumber from E. B. Hunting & Co., and schooner Ida E. Latham for New York, 318,881 feet of lumber. New York steamers took 220,000 feet of lumber, Baltimore steamers 138,960 feet of lumber, and Philadelphia steamers 50,860 feet. Lumber freights are steady at ruling rates. Foreign business is more or less nominal. The rates from this and nearby ports in Georgia are quoted at \$4.25 to \$5.50 for a range including Baltimore and Portland. Me. Steamer rates to New York and Philadelphia are quoted at \$7, to Boston \$8 and Baltimore \$5 per thousand.

Among the timber charters reported in New York during the week are the following: A schooner, 521 tons, from Brunswick to Portland at \$5; a schooner, 373 tons, from Brunswick to New York at \$4.50, and a schooner, 529 tons, from Savannah to Baltimore at \$4.

Brunswick.

[From our own Correspondent.]
Brunswick, Ga., March 23.

A fairly active market is the rule in nearly every avenue of the lumber industry of this port. During the present month there has been a good volume of business reported, and mills at this and adjacent points are all taxed to their utmost to fill orders. The lumber export trade of this port is at present very extensive, and in some cases cargoes are hard to secure. It is stated that every mill supplying Brunswick firms is running on full time, and last week the two mills owned by the Hilton-Dodge Company on St. Simon's Island and in Glynn county, near the city limits, started up running on full time. These two mills have doubled their capacity under recent improvements, and will be run night and day cutting cypress timber. The demand for cypress lumber is now so great that it pays better to handle it than yellow pine. The increase in the Spanish export trade in lumber and timber from this port during the past year is quite remarkable. There are now in port eleven Spanish vessels, and among the leading shippers in that trade are B. Padrosa, Hilton-Dodge Lumber Co., Morgan & Schuyler and R. Torras, all extensively engaged in shipping lumber. Among the clearances of lumber and timber cargoes during the past week the following vessels are reported: Spanish brig Anton for Barcelona with 99,000 feet of lumber and 58,000 feet of timber, from the Hilton-Dodge Lumber Co.; bark Jessie McGregor for Philadelphia with 8698 crossties; schooner Sarah D. C. Rawson for Boston with 294,000 feet of lumber, from J. S. Bailey. The schooner Norman cleared for Providence, R. I., with 290,000 feet of lumber, and the schooner Annie L. Henderson for the same port with 365,000 feet. The American schooner Melissa A. Willey arrived last week from Portland and will load lumber for Rondout, N. Y. Among the charters reported in New York last week were the following vessels: A schooner, 521 tons, Brunswick to Portland at \$5; a schooner, 321 tons, from Fernandina to Patchogue at \$5.50, and a schooner, 354 tons, from Brunswick to New York at \$4.50.

New Orleans.

[From our own Correspondent.]
New Orleans, March 23.

During the present month the local lumber market has been fairly active, with a better export demand. The general conditions of the market, however, in the Southwest have been influenced to a great extent by the weather, which has seriously restricted trade. The demand has not been as brisk as could be desired, but at present there is every indication of an early improvement in business. Throughout the milling sections there is considerable activity, and at all points along the various lines of railroad entering this city mills are generally working on full time. The secretary of the Texas and Louisiana Lumber Manufacturers' Association has issued a statement of mill cut and stock on hand in that territory for January, 1896, as compared with the corresponding month last year. The mill cut for the month of January last amounted to 24,340,648 feet, against 20,364,072 feet a year ago, being a gain of 3,976,576 feet. Stocks on hand were 103,602,410 feet, against 104,866,469 feet, showing a decrease of 1,264,059

fect. The cypress trade, as well as yellow pine, has been quiet, with prices fairly well maintained. Stocks are by no means excessive, but are well assorted and in good condition to meet the demand during the spring and summer months. There is a fair local demand for lumber and building material, and from the present activity in real estate, which is a good index of commercial and industrial prosperity in any city, the spring and summer months will show considerable activity in building and improvements generally. The receipts of lumber at this port for the week ending the 19th inst. were 1,584,500 feet, and since September 1 they amount to 57,746,571 feet, against 43,665,799 feet last year. Brick received during the week amount to 728,000, and for the season 22,131,000, against 14,677,670 last year. The above amounts do not include lumber and brick manufactured in the city. The passage of the bill extending the port limits of New Orleans so as to include Port Chalmette and Westwego will be followed by general activity in building and improvements at these and intermediate points. It is stated that at Port Chalmette over 1000 feet of wharves will be constructed and a number of improvements be commenced at once. The bridge to be built by the Southern Bridge & Railroad Co. across the river about seven miles above Southport, it is stated, will be actively started during the present year. Cleveland capitalists will begin work as soon as possible on a new electric car line to connect Port Chalmette with the city. The Canal & Claiborne road has completed its plans and will have five electric lines, while the location for the powerhouse has been purchased and contracts for construction and supplies made. A number of other improvements have been projected, both by railroads and private corporations, so that during the present year it is estimated that considerable building material will go into consumption, giving employment to a number of mechanics and laborers.

Beaumont.

[From our own Correspondent.]

Beaumont, Texas, March 23.

Millmen in this section feel quite encouraged at the character of business during the past week, and under favorable weather conditions they look for increased activity in the lumber industry. Yard stock shows a further improvement in the demand, which indicates that farmers throughout the country are going in for improvements. The Journal, in its market review, says: "The improved demand for yard stock reported last week has since been maintained, and with settled weather it will continue to grow better. In addition to numerous small orders, several have been received for twenty-five and fifty carload lots. There appears, in fact, to be a better disposition to stock up than has been manifested for at least a year." Timber bills are somewhat scarce, and orders coming in are generally for small quantities. There is a fair trade in shingles, and the demand active at unchanged prices. The export trade is quite active, and a number of inquiries have been received from domestic ports for yard stock. It is thought that quite an extensive business can be cultivated with New York and other East Atlantic ports. Several vessels have cleared from Sabine Pass during the week, and others are now loading. The Reliance Lumber Co. reports the sash, door and blind market during the past week a shade better, and prices showing an upward tendency. The Galveston News, in reviewing the lumber market at Orange, Texas, says: "Shipments by rail this week have not exceeded those of last, but there has been a continual increase in small orders for yard stock. The amount

of that class called for during the past three weeks has aggregated several hundred thousand feet, but as it was distributed over a very large territory it did not have the buoyant effect upon the spirits of the men about the office of a big mill that a few large orders would have."

Lumber Notes.

Mr. W. J. Powell, Clinton, N. C., wants to correspond with barrel manufacturers in the North.

Mr. H. C. Watson, Rockingham, N. C., wants to buy oak spirit barrels knocked down in large quantities.

The exports of lumber from Pensacola last week amounted to over 4,000,000 feet, and of sawn timber, 1,200,000 superficial feet.

Messrs. Roberts & Son, of Fort Davis, Ala., have placed in operation a saw mill, planing mill and shingle machine, and are now in receipt of more orders than they can fill.

The Jones Lumber Co.'s saw mill, at Elizabeth City, N. C., which was purchased by the Pasquotank Lumber Co., is expected to resume work about the first of April.

Mr. Isaac Newton, of Grand Rapids, Mich., has purchased all the timber standing from J. L. Gentry, of Bristol, Tenn., and will erect a saw mill at once in Doran's Cove.

The large saw mill of T. W. Gibbs, near Hot Springs, Ark., together with a large quantity of lumber, was burned on the 20th inst. The loss is estimated at \$10,000, with no insurance.

The large saw and planing mill owned by James S. Clogg, Pocomoke City, Md., and operated by James K. Riggins & Son, was totally destroyed by fire on the 19th inst. The loss is estimated at \$15,000, with no insurance.

The Hall & Burden saw mill, a new industry for St. Martinsville, La., was tested about two weeks ago, and has been in full operation every day since. It has a daily capacity of about 50,000 or 60,000 feet of lumber.

Mr. W. R. Ware, president of the Ware Furniture Co., of Atlanta, Ga., was last week appointed a permanent receiver of the business of the Ware Furniture Co., and he will conduct the business under an order of the court.

The Emporia Lumber Co., at Houston, Texas, received a telegram on the 21st from Emporia stating that the company's saw mill had been destroyed by fire. The planing mill and 5,500,000 feet of lumber were saved. The mill was fully insured.

Mr. G. W. Deen, one of the most prominent turpentine manufacturers of the section near Way Cross, Ga., will, it is stated, soon commence the erection of a new barrel factory near the Way Cross Air Line freight depot at Way Cross, Ga.

It is stated that the lumbermen of Minnesota have come to a final decision regarding the curtailment of the lumber cut. The output is to be reduced 25 per cent this year, which means but 360,000,000 feet will be sawed. No night runs will be made.

The schooner Flora Woodhouse is due to arrive at Sabine Pass, Texas, where she will load lumber for Vera Cruz, Mexico. Her cargo is part of the bill that the Litcher & Moore Lumber Co. is furnishing the English syndicate that is improving the harbor of Vera Cruz.

The waters of the Big Sandy river for the last few days have been receding, and the running of timber will soon commence. Timber began to arrive at Catlettsburg, Ky., on the 20th inst., and it is estimated that 1000 rafts will arrive at that point on the present rise.

The city council of Dalton, Ga., has

tendered exemption from taxes for five years to a Boston woodworking plant with \$75,000 capital, the Dalton Land Co. having given them the lots with railroad frontage. The company will commence to erect buildings on the 1st of April.

Work on the large factory of the Selden Cypress Door Co., at Palatka, Fla., is being pushed vigorously to completion. The company will spend over \$100,000 on its plant and will employ about 300 men. The material will be supplied by the mills of the Wilson Cypress Co., of Palatka.

The Litcher & Moore Lumber Co., of Orange, Texas, chartered on the 19th inst. the schooner Thomas F. Pollard to take a cargo of lumber from Sabine Pass to New York. She will load with 500,000 feet, being the second shipment on the big Chicago order being filled by that firm.

The late rise in the Little Kanawha river has caused the most satisfactory run of timber that has occurred for years. The mills at and near Parkersburg, W. Va., have received between 25,000 and 30,000 logs, and of railroad ties about 100,000 have been floated to accessible points.

The Clyde steamers cleared last week from Jacksonville with nearly 1,000,000 feet of lumber, 8000 bundles of shingles and 6000 crossties. The schooner Aetna cleared for New York with 275,000 feet of lumber, and the schooner Winegance for Elizabeth, N. J., with 200,000 feet of yellow-pine lumber.

The crosstie industry in the mountains of Kentucky has shown a rapid development during the past few years. One-third of the lumbermen in Breathitt county are engaged in getting out crossties. Shipments are now quite active from Jackson, Ky., to the West, and also to the Eastern States.

The clearances of lumber and timber from Mobile for the week ending the 20th inst. were as follows: Lumber, 1,064,042 feet; hewn timber, 22,375 cubic feet, and sawn timber, 11,406 cubic feet. The total clearances of lumber since September 1 amount to 35,882,714 feet, against 36,567,391 feet last year.

The recent rains have been general throughout the upper Tennessee basin, and its tributaries have risen so that all the logs belonging to Chattanooga lumbermen will now be released. The Loomis-Hart Company and Snodgrass & Fuld, of Chattanooga, will each receive about 2,000,000 feet of logs on this rise.

Mr. J. C. Underwood, of Brazoria county, visited Beaumont, Texas, last week for the purpose of establishing a coöperation in that city if sufficient encouragement was offered. Mr. Underwood purposes to equip a factory and utilize the fine coöperation woods of that section. Action in the matter, it is expected, will be taken at once.

The steamship Colorado, of the Mallory Line, cleared from Fernandina on the 18th inst. with 125,000 feet of lumber, shipped by Cooney, Eckstein & Co. The cargo was loaded from the new dock recently built by that firm. The schooner Aaron Rippard arrived on the 16th from Port Royal, S. C., and will take out a cargo of railroad ties for Harold Weston, at Orange Bluff.

Mr. J. S. Ferguson, of New York, who is said to be connected with a large importing house in the interest of a French firm, visited Macon, Ga., last week looking for a site in that vicinity to erect a stave factory. It is stated that the timber for manufacturing staves will be gathered in the Ocmulgee swamps, and as Macon is a good shipping point the plant will in all probability be erected there.

Mr. J. G. Diggins, of Illinois, called at Gainesville, Fla., last week on his return

from the southern portion of the State. Mr. Diggins represents a large syndicate having in view an extensive hardwood timber and lumber enterprise for Florida. He has made a tour of the State for the purpose of selecting a suitable locality, and is favorably impressed with Alachua county, but has not made a definite selection.

The board of directors of the Timpson Lumber Co., of McMullen county, Texas, met last week and elected officers for the ensuing year. Mr. W. A. Russell was re-elected president; Sol. Burket, vice-president; B. F. Harbiter, general manager, secretary and treasurer, and W. F. Foucher, superintendent of mills. The construction and completion of the railroad from Timpson to the mills has been placed in charge of Capt. T. B. Garrison, who will complete the same and operate it.

The lumber market at Knoxville, Tenn., is reported quite active, with the outlook for future trade very encouraging. D. M. Ross & Co., dressed lumber shippers, are running their mills at their full capacity. T. M. Michaels, of the Craig Lumber Co., who operates a saw mill, planing mill and sash factory, reports the demand as much improved. The Alexander Planing Mills is running on full time, and Sexton & Co., hardwood exporters, report a good local demand, as well as an improvement in shipments.

At a meeting of lumbermen in Cincinnati, Ohio, on the 18th inst., an association was organized, to be known as the "Poplar Siding Manufacturing Association." Any manufacturer or wholesale dealer in poplar siding is eligible to membership. The officers elected were: M. B. Farrin, of Cincinnati, president; E. L. Davidson, Parkersburg Mill Co., Parkersburg, W. Va., vice-president, and W. T. Hanna, of the Hanna Lumber Co., secretary and treasurer. All present at the meeting signed the constitution, with but one exception, and that on account of a slight technical matter, to be hereafter arranged.

A meeting for the election of officers of the Suwannee Canal Co. and the annual meeting of directors was held in Atlanta last week. Gen. Henry R. Jackson, of Savannah, was elected president, and Capt. S. F. Walker was re-elected superintendent. The company owns about 450,000 acres of fine black-cypress land in the Okefenokee swamp, and operates an extensive lumber and shingle manufacturing plant at Camp Cornelia, twelve miles south of Falkston. The average capacity of the mill is 40,000 feet for twelve hours, and the mill is operating day and night. The company's shipments are principally to New York, via Fernandina, by the Mallory Line of steamers.

The Mississippi Valley Cottonwood Association met in special session at Memphis, Tenn., on the 16th inst. The meeting was the largest in point of attendance that has been held since the formation of the association, those present representing about 80 per cent. of the output of cottonwood lumber in this country. President F. E. Creelan, of Cairo, Ill., presided, with Mr. George D. Burgess, secretary. The principal topic of discussion was the question of adopting and maintaining a new price-list. After considerable debate the question was referred to a committee, which made its report at the afternoon session. The committee was unanimous in its decision of having and maintaining a new price-list. The list adopted is based upon the prices current at Cairo, though there are some changes made with a view to equalizing the revenue from all forms of timber handled. The next meeting of the association will be held in St. Louis on May 12.

CONSTRUCTION DEPARTMENT.

THE MANUFACTURERS' RECORD seeks to verify every item reported in its Construction Department by a full investigation and complete correspondence with everyone interested. But it is often impossible to do this before the item must be printed, or else lose its value as news. In such cases the statements are always made as "rumored" or "reported," and not as "positive items of news." If our readers will note these points they will see the necessity of the discrimination, and they will avoid accepting as a certainty matters that we explicitly state are "reports" or "rumors" only. We are always glad to have our attention called to any errors that may occur.

*Means machinery, proposals or supplies are wanted, particulars of which will be found under head of "Machinery Wanted."

In correspondence relating to matters reported in this paper, it will be of advantage to all concerned if it is stated that the information was gained from the Manufacturers' Record.

ALABAMA.

Birmingham—Ice Plant.—Arthur Yancey, of Tuskegee, Ala., and N. R. Keeling, of Dayton, Ohio, will erect an ice plant in Birmingham.

Birmingham—Silk Mills.—A silk manufacturer is corresponding with the Commercial Club (W. J. Boles, secretary,) relative to locating a \$20,000 silk plant in Birmingham.

Birmingham—Cotton Mill.—The Birmingham Cotton Factory will put in a Dunn warper, and possibly add a weaving-room to its mill.

Childersburg—Iron Mines.—The Tennessee Coal, Iron & Railway Co. (office, Birmingham,) has purchased 400 acres of iron-ore lands near Childersburg and will develop same at once, taking out from 200 to 400 tons daily. It is stated that this ore is to be used in steel-making by the company.

Doran's Cove—Saw Mill.—Isaac Newton, of Grand Rapids, Mich., has purchased tracts of timber land near Doran's Cove, and will erect a saw mill to cut same.

Munford—Gold Mines.—Gold mines may possibly be developed near Munford, and H. A. Stewart can be addressed for information.

New Decatur—Cannery.—N. B. Hogan, of Springfield, Mo., is organizing a company to put in a \$13,000 canning plant at New Decatur; daily capacity to be 20,000 three-pound cans, and have creamery attached with 12,000 pounds of milk.

New Decatur—Car Shops.—The United States Car Co. is now overhauling and putting in order its machinery, preparatory to resuming operations about April 1. When in full operation this plant requires 500 men.

Prattville—Cotton-compress Works.—The Daniel Pratt Gin Co. is adding to its plant a department for the manufacture of self-pressing cotton presses.

Selma—Pants Factory.—Ellisberg Bros. will establish a factory for jeans pants.

Tuscaloosa—Cotton Mill.—A committee has been appointed to investigate a cotton-mill project. T. M. Leatherwood can be addressed.

ARKANSAS.

Eureka Springs—Mining, etc.—The Magnet Mining & Smelting Co. has been incorporated, with a capital stock of \$100,000, by Dan W. Moore and others.

Helena—Harrow Works.—The Helena Harrow & Manufacturing Co. has been incorporated, with a capital stock of \$20,000, by W. D. Reeves and others.

Little Rock—Marble Works.—Monahan & Viquesney will establish marble works.

Mablevale—Brick Works.—A company has been organized to erect works for brick, tiling, building blocks, etc.; James Lewellen,

president; F. A. Martin, vice-president, and A. W. Norris, secretary.

FLORIDA.

Braidentown—Lumber Plant.—Roach Bros. (care of H. Wadham) are trying to form a \$3000 company to erect a saw mill, box and crate factory.

Brevard County—Timber Lands, etc.—Messrs. A. O. and W. W. Russell, of Cincinnati, Ohio, will develop 112,000 acres of timber and muck lands in Brevard county, expending about \$250,000. Ten miles of railroad will be constructed, also sixty-four miles of canal, etc.

Green Cove Springs—Ice and Canning Plant.—The Green Cove Springs Ice Manufacturing Co. has been organized, with N. Robinson, president; L. W. Lemon, vice-president, and Stephen Trowbridge, secretary, and will erect a cannery and ice plant; capital \$5000.

Key West—Pickling Company.—E. Carandil will put in machinery equipment for pickling fish.

Orlando—Machine Works.—The South Florida Machine Works and Foundry will add the manufacture of cotton gins to its plant.

Palatka—Telephone Line.—A company has been formed for the construction of a telephone line to Federal Point and San Mateo, eighteen and eight miles, respectively. Arrangements have been perfected to connect with the Palatka Telephone Co., who control the franchise.

Tampa—Brewery.—A company with a capital of \$150,000 will erect a brewery. V. M. Ybor, Edward Manara, O. Knight and others are interested.

GEORGIA.

Athens—Knitting Mill.—The Athens Knitting Mills will rebuild its burned plant at once; company will increase capital to \$25,000 from \$10,000 and put in 100 machines; J. H. Dootson, president.

Atlanta—Publishing.—It is rumored that a \$250,000 company will be organized to publish a new daily newspaper. Report says that William Venable is interested.

Atlanta—Telephone System.—The Atlanta Telephone Co., recently chartered, as reported, has elected Simon Baer, of Douglasville, Ga., president, and J. S. James, of Douglasville, secretary. A system and exchange will be established; office, 125 Marietta street.

Augusta—Cottonseed-oil Mill.—Charter has been applied for for the Interstate Cotton Oil Co., to erect the cottonseed-oil mill recently referred to as contemplated. The incorporators are George L. Baker, W. S. Reamer, J. R. Boyleston, A. J. Hagood and James D. Dawson.

Auraria—Gold Mine.—John F. Betz, of Philadelphia, Pa., has erected a gold mill of forty-five tons daily capacity at his mine near Auraria, and is erecting a new stamp mill, which will make his daily capacity considerably larger.

Columbus—Electric-light and Power Plant.—The Columbus Street Railroad Co. has bought the plant of the Brush Electric Light & Power Co. Many improvements will be made to the plant, which will be transferred to the railroad company's power-house in the near future. Machinery to be added will increase the horse-power to 4000, and it is proposed to supply small manufacturing and dwellings with power and light; John F. Flournoy, president.

Dalton—Stove Works.—The city council has made an offer to secure the removal to Dalton of the Cleveland Stove Works.

Dalton—Woodworking Plant.—A Boston company will erect a woodworking plant in Dalton. The city has made a tax exemption to secure the plant.

Fitzgerald—Telephone System.—A. T. Curry is to establish a telephone system.

Fitzgerald—Syrup Factory.—P. H. Fitzgerald intends to organize an extensive company to manufacture syrups from sugarcane.

Griswoldville—Clay Mines.—Mr. Van Buren may possibly develop kaolin deposits on his property.

Iron City—Saw Mill.—The Southern Supply Co., of Birmingham, Ala., has bought a large tract of pine lands at Iron City, and will erect a mill of 35,000 feet daily capacity to cut same.

Lexington—Saw and Grist Mill.—Brooks & Maxwell will erect a saw and grist mill.

Macon—Packing-house.—A company will be organized at once to establish a packing-house. E. Weidmann can be addressed for information.

Macon—Drugs.—The Gray Chemical Co., capital stock \$5000, has applied for charter.

Macon—Medicine Company.—The Taylor Medicine Co., capital \$5000, has applied for charter.

Macon—Cigar Factory.—Bernard Llorens, of Atlanta, Ga., will remove his Cuban cigar factory to Macon.

Rome—Furniture Factory.—W. A. Rhudy, J. D. Hanks, Henry Harvey, W. H. Coker and others have incorporated the North Georgia Furniture Co., and will erect a factory to employ 200 to 300 hands. The capital stock is \$10,000, with privilege of increase to \$100,000.

Rossville—Pants Factory.—The Park Woolen Mills will establish a pants factory in connection with its plant. A large building will be erected and equipped, and a large number of hands will be employed.

Tybee—Electric-light Plant.—Bohan & Cowan may put an electric-light plant in the Cottage Club.

Way Cross—Cigar Factory.—Mr. Ellis will establish a cigar factory in the Wilson Block.

Way Cross—Barrel Factory.—G. W. Deen will erect a barrel factory.

KENTUCKY.

Artemus—Coal Mine.—The Webb Bros. Coal Co. is about to open a new mine.

Artemus—Coal Mine.—The Ely Blue Gem Coal Mining Co. is about to open a new mine.

Halsey—Coal Mines.—The Bird-Eye Jellico Coal Co. (successor to Jellico Bird-Eye Coal Co.) is driving entries, developing three mines, rearranging tipples and handling apparatus, etc., and expects to increase daily capacity from 400 tons to 1000 or 1500.

Hazle Patch—Saw Mills.—W. T. Brooks has bought a 2000-acre tract of timber land and is operating saw mills of 25,000 feet daily capacity on same.

Louisville—Cooperage Plant.—The Kentucky Refining Co. will rebuild at once its cooperage plant that was burned last week. The new buildings will be mostly of brick and iron, both wider and longer than the old ones, and seventy-five hands will be employed.

Marion—Electric-light Plant.—The erection of an electric-light plant is talked of, and R. A. Bingham is mentioned in connection with the report.

Middlesborough—Stove Foundry.—W. P. Holliday, of Ironton, Ohio, recently mentioned as endeavoring to locate stove works at Knoxville, has definitely decided to establish the plant at Middlesborough. A company will be incorporated under the laws of Kentucky with capital of \$30,000. Address Mr. Holliday at Middlesborough.

LOUISIANA.

Evergreen—Shingle Mill.—H. L. Robinson is now erecting the shingle mill recently noted; will cost about \$15,000, have daily capacity of 120,000, and employ when completed thirty men. Contracts for all machinery have been placed.

Mooringsport—Town Company.—The Mooringsport Town Co., Limited, has been incorporated for land improvement purposes with a capital of \$10,000. F. S. Hammond is president, and M. L. Scovell, secretary-treasurer.

New Orleans—Electric-power Plant.—The Canal & Claiborne Street Railway Co. has chosen site for its power-house, and contracts for construction and supplies have been made.

New Orleans—Bridge.—E. L. Corthell, engineer of the Southern Bridge & Railway Co., has announced that in all probability work will be commenced soon on the construction of the big bridge across the Mississippi river, for which the preparatory work, such as making grades, levees, angles, etc., has been completed. Address Mr. Corthell, care of the St. Charles Hotel.

MARYLAND.

Baltimore—Bottling Plant.—The John F. Wiessner & Sons Brewing Co. has completed a bottling plant; building is two stories high, 80x31 feet, equipped with the latest improved machinery.

Baltimore—Metal Works.—The McCauley &

Bryan Company has been incorporated, with a capital stock of \$18,000, for the purpose of manufacturing sheet-metal specialties and light hardware; incorporators, Chas. H. McCauley, J. P. Bryan, Edwin S. Zell, James D. McKnight and Sidney Hall.

Baltimore—Printers' Supplies.—The Simpson & Doeller Company has been incorporated, with a capital stock of \$20,000, for the manufacture of printers' supplies; incorporators, John A. Simpson and others.

Baltimore—Electric Plant.—Application has been made to the legislature for a charter for the Maryland Electric Co., with a capital stock of \$1,000,000, to erect electric plants, utilize water power, etc.; incorporators, Howard Munnikhuysen, Edw. P. Hill, Ferd. Gilbert and others.

Baltimore—Tannery, etc.—The Howard Oak Leather Co., Geo. J. Appold, president, is considering the establishment of another tannery.

Baltimore—Mineral Waters.—The Virginia Rock Spring Co. has been incorporated by Benjamin F. Cohen and others to deal in mineral waters, with a capital stock of \$10,000.

Brunswick—Water Works.—The bill authorizing the city to issue \$15,000 in bonds for the construction of water works has passed the House. Address the mayor for information.

Washington, D. C.—Paper-bag Factory.—The Emerson Bag & Paper Co. has been incorporated, with a capital stock of \$5000, by Thos. O. Hills and others to manufacture and sell paper and bags.

Washington, D. C.—Harness Factory.—The Pate Hardware & Harness Co. has been incorporated under Virginia laws for the manufacture of harness and contractors' supplies; capital stock \$10,000.

Washington, D. C.—Expanded-metal Company.—The officers of the Southern Expanded Metal Co., noted last week, are Wm. C. Lewis, of Washington, president, and J. H. Herriek, of Baltimore, Md., general manager.

Williamsport—Electric-power Plant.—A railway company will possibly erect its electric-power plant in Williamsport. Address Christian W. Lynch, Harrisburg, Pa.

MISSISSIPPI.

Aberdeen—Cotton Compress.—The Hope Mills Compress & Manufacturing Co. has awarded contract to the S. J. Webb Company, of Minden, La., for the erection of a 50-inch compress.

Gloster—Cotton Mill.—A company is being organized to erect a cotton mill of 200 looms and complement of spindles. W. D. Caulfield can give information.

Vicksburg—Electric-light Plant and Water Works.—The city council may possibly investigate as to the construction of water works and electric-light plant. Address the mayor.

MISSOURI.

Columbia—Street Improvements.—The city will submit to a vote a proposition to issue bonds for \$15,000 for street improvements. Address the mayor.

Garden City—Creamery.—The Garden City Creamery Co. has been incorporated, with a capital stock of \$4100, by Jos. Miller and others.

Kansas City—Mining.—The Kansas City Mining & Drill Prospecting Co. has been incorporated, with a capital stock of \$10,000, by Arthur F. Brodie and others.

Kansas City—Sample-case Company.—The W. F. Hammond Sample Case Co. has been incorporated, with a capital stock of \$50,000, by Wm. F. Hammond and others.

Princeton—Electric Lights and Water Works.—The city has voted \$16,500 in bonds for the establishment of electric-light system and water works. Address the city clerk.

Racine—Tripoli Company.—C. S. Allen and associates have incorporated the Allen Tripoli Co., with a capital stock of \$6000.

St. Louis—Spring Company.—The Champ Spring Co. has been incorporated, with a capital of \$20,000, by S. F. Champ and others.

St. Louis—Heating Company.—The W. F. Cozzens Heating Co. has been incorporated, with a capital stock of \$10,000, by W. F. Cozzens and others.

St. Louis—Shoe Factory.—The Brown Shoe Co. has purchased site on which to erect a shoe factory of 5000 daily capacity.

NORTH CAROLINA.

Cedar Falls—Cotton Mill.—The Cedar Falls Manufacturing Co. will put in 200 spindles and sixty looms.

Clinton—Saw Mill.—W. J. Powell will add a saw mill to his plant.*

Concord—Cotton Mill.—The Patterson Manufacturing Co. states that the report of its putting in new machinery is incorrect.

Cummock—Coal Mines.—The New York Gas Coal Co., of New York city, has purchased and will operate on an enlarged scale the Langdon-Henszey Coal Co.'s mines.

Elizabeth City—Dry-kiln.—Kramer Bros. & Co. have closed contract for a dry-kiln for lumber with a daily capacity of 20,000 feet.

Greensboro—Fire-alarm System.—The city has accepted a bid for the construction of a fire-alarm electric telegraph system by the Gamewell Electric Fire Alarm Telegraph Co., of New York.

Kinston—Dry-kiln.—The Kinston Lumber Co. has closed contract for the erection of a dry kiln of 20,000 feet daily capacity.

Mt. Pleasant—Cotton Mill.—W. R. Kindly will organize a \$30,000 company to erect his cotton mill recently reported.

Reidsville—Cotton Mill.—The Edna Cotton Mills, mentioned last week, will have as its final equipment 15,000 spindles, with a view to which buildings are now being built.

Salem Iron Works.—The Salem Iron Works will put in additional machinery, including air compressors.*

Salisbury—Steam Laundry.—J. P. Shelley contemplates the establishment of a steam laundry.*

Salisbury—Electric-light and Power Plant.—John S. Henderson and associates, who have franchise for electric lights and railway, will erect an electric plant in the future.*

Salisbury—Laundry.—A steam laundry will be established.

Statesville—Flour Mill.—H. W. and R. A. Miller and John T. Rayner will erect a roller flour mill of forty barrels daily capacity.

Webster—Telephone Lines.—Joseph J. Hooker will extend his telephone lines.*

Winston—Publishing Company.—J. W. Goslen is trying to organize a \$20,000 company to publish a daily newspaper.

SOUTH CAROLINA.

Abbeville—Water Works.—The construction of a system of water works is contemplated. Address the mayor.

Alcohu—Cotton and Knitting Mills.—The D. W. Alderman Company will erect a knitting mill for hosiery and a cotton factory this summer.

Anderson—Cotton Mill.—A dispatch states that the Anderson Cotton Mills will erect a \$250,000 addition to its plant.

Barnwell—Cotton Mill.—A movement has been started for the erection of a cotton mill. Over \$20,000 of stock has been subscribed and charted applied for.

Branchville—Cotton Mill.—The cotton-factory project is progressing successfully, and charter is being applied for. The incorporators are Isaac Sauls, H. H. Jennings, T. M. Raysor, B. H. Moss and others.

Columbia—Rolling Mill.—A rumor states that a \$10,000 company will be formed to erect a rolling mill for remelting cast irons.

Greenville—Mercantile.—Charter has been granted to Dreifus & Co. for mercantile purposes; capital \$10,000.

Greenwood—Cotton Mill.—The Grendel Mills, reported recently as incorporated, has fully organized, with D. A. P. Jordan, president, and will erect a 10,000-spindle mill at once.

Greer Depot—Cotton Mill.—The Victor Manufacturing Co. writes that it will not put in a 20,000-spindle plant to start with, but is putting in a power plant so that it can easily develop to 20,000 during the fall or early in the coming year. Ten thousand spindles will be the equipment at the start.*

Lancaster—Electric-light Plant.—The Lancaster Cotton Mills will put in an electric-light plant for lighting the city.

Port Royal—Machine Shop.—Plans are now being prepared for a machine shop to cost \$60,000, to be built by the government for construction work and repairing slight injuries to vessels. Address Hilary A. Herbert, Secretary of the Navy, Washington, D. C.

Spartanburg—Cotton Mill.—A company will be organized by R. Z. Cates, J. B. Lee, S. J. Simpson, J. B. Cleveland, W. F. Smith and Jos. Walker for the erection of a 10,000-spindle mill. Charter has been applied for.

Sumter—Furniture Factory.—Witherspoon Bros. have built a furniture factory.

Winnsboro—Cotton Mill.—The Fairfield Cotton Mills, J. M. Beatty, secretary, has

awarded contract to D. K. Cecil, of Salisbury, N. C., for the erection of its buildings, to be of brick.

TENNESSEE.

Bristol—Knitting Mill.—C. L. Sevier contemplates the establishment of a knitting mill for cheap half-hose.*

Brushy Mountain (not a postoffice)—Coke Ovens.—The penitentiary commission of the State of Tennessee, W. M. Nixon, chairman, will erect coke ovens at the mines at Brushy Mountain, to be worked by the convicts.*

Chattanooga—Cotton Gin.—The Chattanooga Cotton Oil Co. will put in a cotton gin at its oil mill.

Chattanooga—Hosiery Mill.—Carswell & Carswell contemplate the establishment of a small hosiery mill, to be enlarged if experience warrants it.*

Chattanooga—Bridge.—S. W. Divine will make a proposition to the city council for the construction of a \$20,000 bridge if certain railway privileges are conceded.

Cleveland—Chair Factory.—W. S. Milne is to establish a chair factory, but a location has as yet not been selected.

Dayton—Flour Mill.—Louis McDonald and associates have bought the Allen Flouring Mills for \$5708, and will overhaul and operate same.

Franklin—Creamery.—J. B. McEwen has sold a site to a company for a creamery (not a brewery, as recently stated).

Johnson City—Handle Factory.—Boring Bros. have purchased and will operate the Miller & Carmichael handle factory.

Knoxville—Cotton Mill.—The Knoxville Woolen Mills will erect a \$100,000 cotton-mill addition to its plant, putting in 5000 spindles and employing 150 additional operatives.

Knoxville—Brick Works.—The Jones Brick Co. has recently added machinery to its plant, at a cost of about \$10,000.

Mt. Pleasant—Flour Mill.—C. H. Ingram and J. M. Hunter will erect a flour mill of 100 barrels capacity.

Nashville—New Industries.—The New Industries Committee of the Chamber of Commerce is endeavoring to locate several industries with which it is now in correspondence, including a \$500,000 implement factory, knitting mill, cordage factory, etc.

Paris—Tobacco Works.—C. P. Hudson will establish tobacco works.

South Pittsburg—Stave Works.—The Oakley Stave Manufacturing Co. will establish a plant.

Sweetwater—Cotton Mill.—The erection of a cassimere mill is talked of, and S. T. Jones and W. S. McCauley are interested. A \$50,000 to \$75,000 plant is contemplated.

Sweetwater—Electric-light Plant and Cannery.—The erection of a cannery and electric-light plant are talked of. J. W. Clark is the promoter.

Tullahoma—Manufacturing.—T. & B. Carter will establish a manufacturing enterprise.

TEXAS.

Beaumont—Cooperage Plant.—J. C. Underwood, of Brazoria county, contemplates the establishment of a cooperage in Beaumont.

Bryan—Bridge.—Application has been made for a charter for a company that proposes to construct an iron bridge across the Brazos river at Pitts Ferry; incorporators, Wm. Koppe, H. Rhode and others; capital stock \$20,000.

Dallas—Ice Plant.—J. L. Clark, G. G. Wright and S. Q. Richardson have incorporated the Dallas Ice Co., with a capital stock of \$50,000, to erect an ice plant.

Denison—Roundhouse.—The Denison & Washita Valley Railroad will appropriate \$100,000 for the erection of a roundhouse and other improvements.

Fairwood—Cannery.—Sydney T. Fontaine will form a \$10,000 company to establish a cannery.

Gainesville—Cotton Mill.—There is talk of the organization of a \$100,000 cotton-mill company. J. M. Lindsay can be addressed.

Galveston—Canal.—The Gulf Coast Canal & Navigation Co. has awarded contract to Chas. H. Hubbell and Timothy E. Tarsney for the construction of a canal, seventy-five feet at the water line, depth of eight feet at average low tide, to extend from Galveston to Corpus Christi. The work will cost \$1,100,000.

Houston—Cemetery.—R. H. Dodd and others have organized the College Park Cemetery Co. with a capital stock of \$12,500.

Jacksonville—Fruit Company.—H. L. Hodges and others have organized the Jacksonville Fruit Co. with a capital stock of \$5000.

Laredo—Tannery.—The Villegas Tanning

& Leather Goods Co. has been organized by Daniel Milmo, Q. Villegas, J. Villegas and Eugene Loza to operate a tannery.

Laredo—Machine Shop.—W. L. Gliddens is erecting a new building for his machine shop.

Llano—Electric-light Plant.—S. Eckstein, of Kerrville, Texas, contemplates the erection of an electric-light plant in Llano.

Mt. Pleasant—Paint Mills, Brick Works, etc.—The brick works, etc., mentioned last week (under Whitewright, Texas,) will be located near Mt. Pleasant, Texas, where a site of forty acres of clay lands has been purchased by D. J. Evans, of Whitewright, Texas, and associates. The parties will erect next month a mill for manufacturing aluminum paints, adding terra cotta and brick works later on.*

Rusk—Spring Factory.—J. B. Carter has started a bed-spring factory.

San Antonio—Oil Company.—The Retail Grocers' Oil Co. has been incorporated, with a capital stock of \$5000, by R. Junghecker and others.

San Antonio—J. H. McLeary, R. W. Stayton and others have incorporated the Postal Telegraph Cable Co., with a capital stock of \$10,000, to be increased to \$2,000,000. Other incorporators besides those mentioned are Massachusetts capitalists who are interested in the Southwestern Telephone & Telegraph Co., of Texas.

San Antonio—Shirt and Overall Factory.—Geo. W. Bell will establish a \$25,000 factory for shirts and overalls.*

Sherman—Brick Works.—The establishment of pressed-brick works is talked of, and local capitalists are ready to invest \$20,000 in a plant for making a fine quality of pressed brick; fine clay beds in readiness. The Sherman Iron Works can be addressed for information.

Silsbee—Brick Works.—D. A. Bellevue, Shepherd, Texas, will establish brick works at Silsbee about May 1.

Taylor—Cheese Factory.—F. Fluehman will establish a cheese factory near Taylor.

VIRGINIA.

Blacksburg—Water Works.—The Blacksburg College will issue bonds for \$15,000 to construct water works. Compressed air will be used and 100,000-gallon tank erected.

Buena Vista—Glass Works.—The Blue Ridge Glass Co. has fully organized, with J. W. Bruno, president; S. S. Christie, vice-president, and W. T. Paxton, secretary. The company will put in operation the Buena Vista Glass Co.'s plant.

Danville—Cotton Mill, etc.—The Riverside Cotton Mills have purchased the property and rights of the Dan River Power Co., which was arranging to erect a 40,000-spindle mill. The purchasers will carry out the plans of the original owners.

Dendron—Planing Mill.—The Surrey Lumber Co. will erect a planing mill and has broken ground for same; Francis Waters, president, Baltimore, Md.

Lynchburg—Mattress Factory.—Arthur Connell will establish a factory for mattresses and cushions from coconut fibre.

Roanoke—Printing Plant.—The Stone Printing & Manufacturing Co. has let contract for the erection of a duplicate of its present building.

Timberville—Mercantile.—Fahney, Hoover & Co., Limited, have incorporated, with a capital stock of \$4000; C. Driver, president.

Virginia—Canal Construction.—The Lake Drummond Canal & Water Co. (Walter B. Brooks, of Baltimore, Md., president) has awarded contract to Patrick McManus, of Philadelphia, Pa. (office, 505 Betz Building), for the reconstruction of the old Dismal Swamp canal. The contract covers the work complete, including locks, dams, waste-weirs, bridging, culverts, etc., and extends from a point on the Elizabeth river near Norfolk, Va., to the Pasquotank river near South Mills, N. C. The waste-weirs will be three in number, without gates, each to be 100 feet long; four drawbridges at road crossings, each to have 40-foot span and to be fourteen feet wide. Company has capital stock of \$1,000,000, and is authorized to issue \$1,200,000 in bonds.

WEST VIRGINIA.

Morgantown—Bridge.—The West Morgantown Suspension Bridge Co. will build a bridge, 600 feet long, of steel and iron wire cables, etc., to cost about \$6000; George C. Sturges, treasurer.*

BURNED.

Athens, Ga.—The Athens Knitting Mills, damaged by fire to the extent of \$12,000.

Emporia, Texas.—The Emporia Lumber Co.'s saw mill.

Grenada, Miss.—Mr. Berry's cotton gin and grist mill; loss \$5000.

High Point, N. C.—J. C. Callum's mattress factory; loss \$2750.

Hot Springs, Ark.—T. W. Gibbs's saw mill; loss about \$10,000.

Knoxville, Tenn.—A. J. Parszky's cannery.

Pocomoke City, Md.—The planing mill of James S. Clogg.

Seale, Ala.—The cotton gin of N. B. Sanders.

BUILDING NOTES.

Atlanta, Ga.—Office Building.—The Equitable Building Co. has applied for a charter, and talks of adding two stories to its eight-story building.

Baltimore, Md.—Dwellings.—Robt. Brooks will erect thirty-six dwellings.

Baltimore, Md.—Library.—A branch of the Litch Pratt Free Library will be erected; Bernard Steiner, librarian.

Baltimore, Md.—Engine house.—The mayor has signed an ordinance appropriating \$15,000 for the erection of an engine house. Address the inspector of buildings.

Baltimore, Md.—Hall.—The Greenmount Methodist Church will erect a three-story building for hall, etc. Address Rev. L. A. Chirkeld.*

Bellville, Texas Jail.—Austin county has awarded contract to the Pauley Jail Building Co., of St. Louis, Mo., for the erection of the new \$20,000 jail.

Biloxi, Miss.—Hotel.—The hotel noted last week will be built by the Live Oak Hotel & Investment Co., incorporated with a capital stock of \$250,000 by C. F. Theobald, Edw. Glennan and others.

Birmingham, Ala.—Residence.—Adams & Schneider have contract to erect a \$14,000 residence for George Morris.

Bluefield, W. Va.—Theatre.—A report states that an opera-house to cost \$15,000 will be built.

Bristol, Va.—School.—Sealed proposals will be received until April 12 for the erection of a schoolhouse. For particulars address H. Doriot, architect.

Camilla, Ga.—Church.—Bids will be opened April 3 for the erection of a church building of frame veneered brick and solid brick with veneered gables after plans by G. W. Foote, of Atlanta. Address M. E. Bush, secretary.

Carrollton, Ga.—School.—The city has voted affirmatively for the issuance of \$15,000 in bonds for the erection of a city school building. Address the mayor.

Greensboro, N. C.—Theatre.—It is reported that a company will be organized to erect an opera-house at cost of about \$25,000.

Harrisonburg, Va.—Courthouse.—T. J. Collins, of Staunton, has revised his plans for the Rockingham county courthouse.

Knoxville, Tenn. Store.—Baumann Bros. will erect a two-story brick store, 25x37 feet.

Lancaster, S. C.—Cottages.—The Lancaster Cotton Mills will erect twenty cottages.

Latta, S. C.—Warehouse.—L. B. Rodgers will form a company to erect a tobacco warehouse.

Moultrie, Ga.—School.—The city has voted in favor of issuing the \$5000 bonds for the erection of a schoolhouse. Address the mayor.

Nashville, Tenn.—Depot.—A bill providing for the erection of a large union depot will probably be introduced in the next session of the city council. Address the mayor.

Newberry, S. C.—Church.—Wilson & Edwards, of Columbia, S. C., are preparing plans for a church building for Newberry.

New Orleans, La.—Dwellings.—Building permits have been issued to J. H. Keller for four double cottages to cost \$5000, J. Bessel for double cottage to cost \$1000, C. Miller for store and dwelling to cost \$2000, Thos. N. Boylan for two-story dwelling to cost \$2000.

Newport News, Va.—Jail.—The city council will recommend the erection of a new jail. Address the mayor.

Opelika, Ala.—Courthouse.—The commissioners of Lee county have decided to erect a courthouse, and have appointed W. C. Robinson, J. L. Allen and W. H. Melton as a committee to secure plans and specifications.

Palatka, Fla.—Residences.—Chas. Kupperbusch is erecting two fine residences on Kirby street.

Red Bank, S. C.—Courthouse.—The erection of a \$20,000 courthouse is talked of. Address the county clerk.

Richmond, Va.—Mercantile Building.—Jno. Murray has awarded contract to Fritz Sitter

ding for the erection of a four-story mercantile building, to cost \$25,000; plans by Carl Ruchmund.

Richmond, Va.—Courthouse.—The commissioners of Henrico county have definitely decided to erect the proposed \$20,000 courthouse lately mentioned. Address the county clerk.

Salisbury, Md. City Hall, etc.—Thos. H. Mitchell has completed plans for the city's new city hall and engine-house.

Salisbury, Md. City Hall.—Plans have been completed and submitted to the city council for a building for the use of the city. Address the mayor.

Union, S. C.—Store.—Reece Harry will erect a store after plans by C. C. Hook, of Charlotte, N. C.

Vicksburg, Miss.—University Buildings.—The city has applied to the legislature for authority to issue bonds for the erection of buildings for the medical department of the University of Mississippi.

Warrensburg, Mo.—Courthouse.—The county court has accepted the plans of Geo. E. McDonald, of Lincoln, Neb., for the new courthouse.

Washington, D. C.—Dwellings.—Frank L. Hanvey will erect eight dwellings, to cost \$50,000.

Washington, D. C.—Dwelling.—James Bennett has permit to erect a \$4000 dwelling; J. M. Coleman a \$3000 one, and S. L. Phillips, trustee, a \$2000 one.

Washington, D. C.—Storage-houses.—The Heurich Brewing Co. has let contract to John McGregor at \$15,000 for the erection of storage buildings.

Way Cross, Ga.—W. G. & A. P. Brantley will erect a block of two-story houses.

Way Cross, Ga.—Hotel, etc.—J. D. Smith and A. R. Bennett have let contract for the erection of a three-story brick hotel and business block.

Wheeling, W. Va.—Hose House.—Joseph Leiner and E. B. Franzheim have prepared plans for a new hose house for the city, to cost about \$10,000. Address the mayor.

Wheeling, W. Va.—Church.—A church building will be erected at Altenheim by J. N. Vance after plans by Franzheim, Giesey & Farris.

Wilmington, N. C.—Stores.—H. E. Bonitz is preparing plans for a two-story brick store and residence for L. Hansen; also for brick storehouse for H. L. Vollers. Bids are wanted.

Winston, N. C.—Academy.—Frank P. Milburn is preparing plans for the Slater Industrial Academy buildings, to be built near Winston, at a cost of about \$15,000.

RAILROAD CONSTRUCTION.

Steam Railways.

Brownstown, Ark.—The road which is proposed to be built from the plant of the Cement Company at White Cliffs has its terminus. It is reported, at Texarkana, Texas. John Kelly, who is interested, may be addressed at Brownstown.

Clarksburg, W. Va.—It is reported that work is about to begin on the road between Clarksburg and New Martinsville. Hon. Johnson N. Camden, of Parkersburg, is promoting the enterprise. The line will be about eighteen miles long.

Concord, N. C.—Business men have secured \$75,000 in stock subscriptions. It is reported, for a road to be built from Concord to a connection with the Seaboard Air Line at Charlotte. The distance is twenty-five miles.

Elkton, Md.—The Cherry Hill, Elkton & Chesapeake City Electric Railway Co. has been organized to build a road from the northern boundary of the State to the Sassafras river. The section from Cherry Hill to Chesapeake City, nine miles, will be constructed first. C. H. Smith, at Elkton, is secretary.

Falkston, Ga.—The Suwannee Canal Co. has made a survey for an extension of its road from Falkston to the Satilla river, twenty-five miles. Henry R. Jackson, at Atlanta, is president.

Fayetteville, Tenn.—It is stated that the project of building a line from Fayetteville through Decatur, Ala., to a connection with some railroad entering New Orleans has been revived. M. Bearden, of Fayetteville, is interested. J. E. Roads, it is stated, has secured a grading contract.

Fort Smith, Ark.—E. J. Crandall, one of the promoters of the Fort Smith & Western Coal Railroad, states that contracts have been let for grading five miles of the line, which is to be eighty-one miles long, with a 10-mile branch. It is to extend from Fort

Smith to a junction with the Missouri, Kansas & Texas near South McAlester. I. T. Mr. Crandall may be addressed at Fort Smith.

Galveston, Texas.—The Gulf & Interstate has been completed from Beaumont, Texas, to Bolivar Point, on Galveston bay. It is about seventy miles long. Fox Winnie is manager, and Leon Blum, vice-president of the company. Both are at Galveston.

Harriman, Tenn.—The condition of the Tennessee Central road is as follows: All the grading between Monterey and Crossville, twenty-two miles, is completed; about twelve miles are graded between Crossville and Rockwood; grading is also nearly completed between Rockwood and Harriman, twelve miles. Ward & Courtney have secured one of the contracts to complete the roadbed. They may be addressed at Emory Gap, Tenn.

Harriman, Tenn.—It is reported that the Cincinnati Southern has decided to change its route on the Harriman section and avoid the use of one of its tunnels. G. B. Nicholson, at Cincinnati, is chief engineer.

Jacksonville, Fla.—It is rumored that the eventual terminus of the Florida East Coast line is to be at Turtle Bay, on the extreme southern coast, and that arrangements are being made to build to this point. H. M. Flagler, 26 Broadway, New York, is president.

Mayfield, Ky.—The parties interested in the Calro & Cumberland Gap route have been making a preliminary examination of it. The route passes through most of the southern counties of the State. Those interested are Baron de Courtier, E. A. Green, of New York; R. B. Wicks, of Warren, Ohio; W. L. Moorman, of Lynchburg, Va., and C. T. Ford, of Central Valley, Ky.

McAlester, I. T.—It is reported that the Choctaw, Oklahoma & Gulf Company is making arrangements to extend its lines further east. Francis I. Gowan, 420 Walnut street, Philadelphia, is president.

McAlester, I. T.—It is stated that the proposed extension of the Choctaw, Oklahoma & Gulf road is to connect it with the Kansas City, Pittsburg & Gulf system at a point near Fort Smith, Ark. Francis I. Gowan, at 420 Walnut street, Philadelphia, is president.

New Orleans, La.—It is announced that the Illinois Central will build a second track from Chicago to Cairo, Ill., and will also construct sixty miles of sidings between the Ohio river and New Orleans. J. F. Wallace, at Chicago, is chief engineer.

Norfolk, Va.—It is reported that arrangements have been completed for the extension of the Atlantic & Danville road from its present terminus, Danville, to some point in West Virginia. B. Newgass is president.

Portsmouth, Va.—Sec. C. R. Warren, of the Portsmouth, Pig's Point & Newport News Company, advises the Manufacturers' Record that the line will be ten miles long. Steam or electricity will be used. As yet this is undecided. It is stated that the road is to be built within a few months. Most of those interested are wealthy truck farm owners.

Queenstown, Md.—It is stated that Wapd, Allen & Burns have secured the contract for building twenty-four miles of the Queen Anne's Railroad from Denton, Md., across the Delaware line. They may be addressed care of J. W. Troxel, engineer, at Queenstown.

Quinnimont, W. Va.—J. R. Beatty & Co. advise the Manufacturers' Record that the lumber road they are building will be fourteen miles long.

Sour Lake, Texas.—Business men may form a company to build a road nine miles long to a connection with the Southern Pacific system. It is stated that the Southern Pacific will lay the rails if the people will grade the roadbed and furnish ties.

Tallassee, Ala.—It is stated that the Tallassee & Montgomery company, which has completed its road from Tallassee to a point on the Western Railroad of Alabama, nine miles, has decided to extend it to Montgomery, thirty miles further. W. H. Mison, at Tallassee, may be addressed.

Texarkana, Ark.—The division of the Kansas City, Pittsburg & Gulf from Texarkana to Shreveport, La., seventy-two miles, has been completed and is in operation. Fifty miles of the extension from Shreveport to the Gulf of Mexico are being built, and seventy miles between Texarkana and Fort Smith, Ark., are being completed.

Walterboro, S. C.—The Walterboro & Western road is nearly completed to Ehrhardt's Station. J. R. Stokes is general manager. He may be addressed at Walterboro.

Washington, D. C.—The Georgetown branch of the Pennsylvania system, about

three miles long, has been completed and opened for operation.

Electric Railways.

Cadiz, Ky.—The parties interested in the proposed electric line from Cadiz to Cobb Station, eleven miles, include W. C. White, J. W. Crenshaw, F. G. Terry and E. R. Street.

Chattanooga, Tenn.—S. W. Divine and others have formed a company to build a trolley line from Chattanooga to Chickamauga Park.

Chattanooga, Tenn.—The Chattanooga Rapid Transit Co. has secured a franchise to build a trolley line twelve miles long to Chickamauga Park. S. W. Divine, at Chattanooga, is president.

Hagerstown, Md.—It is stated that the Hagerstown Railway Co. has begun purchasing supplies. Christian W. Lynch is president.

Kansas City, Mo.—Charles E. Finney and others intend building a road along Wyandotte street and to the stock-yards. An underground-conduit or storage-battery system will be used.

Louisville, Ky.—It is reported that the Chesapeake & Ohio Company may purchase the Carter Caves, in Carter county, and connect them with its system by an electric line five miles long. M. E. Ingalls, at Cincinnati, is president.

North East, Md.—The Rising Sun, North East & Elk River Electric Railroad has been formed by Andrew Anderson, George W. Cosden, Joseph T. Reed, Levi O. Cameron, John M. C. Carhart, William L. Mearns, of North East; Ellis L. Duykinec, Aaron L. Duykinec, M. E. Kirk and James Mallen, all of Cecil county. They propose to build an electric road from Rising Sun, by way of Bayview and North East, to a point on the Elk river near Hylands. The minimum capital stock is to be \$50,000. The distance is about sixteen miles.

Oregon, Mo.—The Oregon & Forest City Electric Railway Co. has been incorporated, with \$60,000 capital, to build a trolley line in Holt county. James E. Cummins, F. C. Oakley and Robert C. Benton are among the directors.

Richmond, Va.—The Fairmount Traction Co. announces that it will begin work on an electric line from Fairmount suburb to Richmond. F. C. Brauer, of Richmond, is one of the directors.

Salisbury, N. C.—Lee S. Overman, one of the directors of the Salisbury Electric Railway Co., advises the Manufacturers' Record that it will be about two miles long. Contractors are invited to correspond.

Washington, D. C.—The Washington, Sandy Springs & Baltimore electric line is now being graded at several points on the route. James B. Colegrove, at Washington, is president of the company.

Machinery, Proposals and Supplies Wanted.

Manufacturers and others in need of machinery of any kind are requested to consult our advertising columns, and if they cannot find just what they wish, if they will send us particulars as to the kind of machinery needed we will make their wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. The MANUFACTURERS' RECORD has received during the week the following particulars as to machinery that is wanted.

Air Compressors.—The Salem Iron Works, Salem, Va., wants to buy air compressors. Send full particulars, prices, discounts, etc.

Barrels.—H. C. Watson, Rockingham, N. C., wants to buy oak spirit barrels knocked down.

Boiler and Engine.—See "Knitting Mill."

Boiler and Engine.—The Gainesville Cottonseed Oil Mill & Gin Co., Gainesville, Texas, wants a 200 horse-power engine and a 200 horse-power boiler.

Boiler and Engine.—See "Laundry Machinery."

Boilers.—The Builders' Supply Co., St. Augustine, Fla., wants to buy at once a battery of boilers (cylinder) complete, except stack, of sixty or seventy-five horse-power; good second-hand will do.

Boilers.—See "Elevators."

Bottle, Cork and Sealing-wax Manufacturers.—D. C. Campbell, De Funiak Springs, Fla., wants to correspond with bottle, cork and sealing-wax manufacturers.

Brick Machinery.—The Cherokee Ochre & Barytes Co., Cartersville, Ga., wants description and prices of brick machinery.

Bridge.—The West Morgantown Suspension Bridge Co., Morgantown, W. Va., will rebuild span 600 feet; will want steel or iron-wire cables, iron floor beams, light but stiff and strong; suspending rods or iron ropes, and details; estimated cost, \$5000 to \$6000. Address Geo. C. Sturgiss, treasurer.

Building Material.—C. O. Brown & Bro., Columbia, S. C., want to correspond with manufacturers of linked sash weights.

Building Materials and Supplies.—Geo. C. Sturgiss, Morgantown, W. Va., wants to hear from manufacturers of tin, iron and slate roofing, water elevators, metal ceilings, hot-air heaters (natural gas fuel), water-closets, fireplaces and hearths, tiling, etc.

Carpet Machinery.—W. F. L. Steele, Rockingham, N. C., wants to obtain information about looms for carpet weaving.

Coke-oven Supplies, etc.—The penitentiary commission of the State of Tennessee, W. M. Nixon, chairman, Nashville, Tenn., will want fire-brick, bottoms, conveying machines, etc., for erecting coke plant.

Compressed-air Machinery.—J. E. Gadsey, Abbeville, S. C., wants to correspond with manufacturers of compressed-air machinery.

Cotton-gin Supplies.—W. E. Fuller, Perry, Ga., wants to buy a gin-saw flier.

Cotton-mill Machinery.—See "Carpet Machinery."

Cotton-mill Machinery.—See "Sash-cord Machinery."

Cotton-mill Machinery.—W. D. Caulfield, Gloster, Miss., wants to correspond with manufacturers of spindles and looms.

Cotton-mill Machinery.—The Victor Manufacturing Co., Greer Depot, S. C., will want to buy 10,000 spindles during the fall or early in the coming year.

Creosoting Material, Screw Bolts, Cast Washers, Drift Bolts, etc.—Wm. Harrison, Aransas Pass, Texas, wants prices on the following material: Sufficient dead oil of coal tar, with 50 per cent. of naphthalene, to creosote 13,000 line feet of piles, using fifteen pounds of the compound per cubic foot of piles (estimated about 200,000 pounds); also wants 5500 pounds of wrought-iron bolts, as follows: Cap and drift bolts seven-eighths inches diameter and twenty-two inches long, stringer drift bolts $\frac{3}{4}$ x22, stringer drift bolts $\frac{3}{4}$ x19x3-inch thread, guard rail and screw bolts $\frac{3}{4}$ x13x2 $\frac{1}{2}$ -inch thread, cast washers $\frac{3}{4}$ x3 and $\frac{1}{2}$ x2 $\frac{1}{2}$, boat spikes for ties and sway braces $\frac{1}{2}$ x10, all to be thoroughly soaked in boiled linseed oil before leaving the shop.

Drilling Machinery.—J. M. Stalvey & Co., Socastee, S. C., wants to correspond with manufacturers of well-drilling outfits, etc.

Dry-kiln.—The Southern Supply Co., Birmingham, Ala., will buy equipment for dry-kilns.

Electric Plant.—John S. Henderson, Salisbury, N. C., will want bids on the erection of an electric-light and power plant.

Electrical Supplies.—The Sparks Electrical Construction Co., Richmond, Va., wants electrical supplies of all kinds.

Elevator.—James Hines, Washington, Ga., wants a hand elevator for storehouse.

Elevators.—The Fairbanks Company, New Orleans, La., is in the market for direct connected electric elevators, a five horse-power boiler and ten horse-power boiler.

Flour-mill-factory Machinery.—See "Grinder and Corrugator."

General Line of Machinery.—Wm. Harrison, Aransas Pass, Texas, wants catalogues and price-lists of machinery of all kinds.

Glass Jars.—F. Bassett, Chattanooga, Tenn., 142 Whitehall street, is in the market for cheapest cash purchase of one-half-pint, quart and two-quart glass jars, with screw caps.

Grinder and Corrugator.—C. M. L., care of Manufacturers' Record, wants to buy a grinder and corrugator for redressing rolls for flour mills; second-hand.

Heating Apparatus, Plumbing, etc.—Sealed proposals will be opened April 14 for the construction of building containing eight sets of officers' quarters, including steam heating, plumbing and gas piping. For further information address J. W. Pullman, U. S. A., Fort Monroe, Va.

Ice-cream Machine.—Robert Phillips, 1532 14th street, Washington, D. C., wants a 40-quart ice-cream machine, buckets, cans, etc.

Knitting Machinery.—Carswell & Carswell, Chattanooga, Tenn., want complete information regarding the manufacture of women's medium-grade hosiery, estimates on cost of mills, etc.

Knitting Machinery.—C. L. Sevier, Bris-

Ind. Tenn., wants full information regarding the manufacture of half-hosiery, cheap grade, estimates on cost of equipment of machinery, etc.

Knitting Mill.—Lock Box 96, Rocky Mount, N. C., wants complete particulars of knitting mills, with estimates on equipment of plant (including boiler and engine).

Lathe.—G. S. R., 213 East Lafayette avenue, Baltimore, Md., wants a small foot-power lathe; state price.

Laundry Machinery.—J. P. Shelley, Salisbury, N. C., wants estimates on cost of steam laundry complete to supply town of 10,000 inhabitants; give figures with and without boiler and engine.

Machine Tools.—The Fairbanks Company, New Orleans, La., wants a pipe machine threading from three to twelve inches and from one-half to three inches.

Machine Tools.—The Miller & Jones Furniture Co., Fort Smith, Ark., is in the market for an automatic knife grinder and a filing machine.

Machine Tools.—J. M. Church, Linwood, Ala., is in the market for good second-hand variety lathe.

Machine Tools.—W. J. Powell, Clinton, N. C., wants a screw-cutting lathe, in good condition.

Mining Machinery (including Rails, Cars, etc.).—The Webb Bros. Coal Co., Artemus, Ky., wants mining outfit, including cars, rails, screens, scales, etc.

Mining Machinery (including Rails, Cars, etc.).—The Ely Blue Gem Coal Mining Co., Artemus, Ky., wants outfit for mining, including rails, cars, scales, screens, etc.

Paint-mill Supplies.—D. J. Evans, White-wright, Texas, wants to buy dry coloring for paint mills.

Pleating Machine.—R. C. Douglas, 1533 14th street N. W., Washington, D. C., wants to buy an accordion pleating machine.

Plumbing, Interior Finish, etc.—Proposals will be opened April 17 for interior finish, plumbing, approaches, etc., for United States building at Roanoke, Va. Address Wm. M. Aiken, supervising architect, Washington, D. C.

Railway Equipment.—The Baltimore & Ohio Railroad Co., (John K. Cowen and Oscar G. Murray, receivers,) Baltimore, Md., will soon be in the market for about sixty freight locomotives, fifteen passenger locomotives, 3000 coal cars and 2000 box freight cars; Harvey Middleton, superintendent of motive power.

Railway Equipment.—John S. Henderson, Salisbury, N. C., will want bids for the construction of an electric street railway.

Railway Equipment.—J. R. Beatty & Co., Guilford, N. C., will need about 250 tons of 35-pound rails; also are now negotiating for locomotives.

Sash-cord Machinery.—Rev. F. J. Murdoch, Salisbury, N. C., wants prices on machinery for making sash cord, namely, spoolers, benders, finishers and hankers.

Saw.—See "Woodworking Machinery."

Saw Mill.—The Southern Supply Co., Birmingham, Ala., will buy equipment for saw mill.

Saws.—James Sherry, Eufaula, Ala., wants a wood saw and frame.

Saws.—J. H. Abernethy, Shannon, Miss., wants to buy rip saw, band saw, cut-off saw, etc.

Sewing Machines, etc.—See "Shirt Factory."

Shafting.—James Sherry, Eufaula, Ala., wants prices on eight-inch shafting.

Shirt Factory.—Geo. W. Bell, San Antonio, Texas, wants to buy machinery for a shirt and overall factory, not to exceed \$25,000 in cost.

Stapling or Stitching Machines.—Thomas Bacon, Jr., Maltby House, Baltimore, Md., wants a few wire-stapling or stitching machines for nailing veneer wood; size of staple, three-eighths of an inch wide and one-fourth of an inch long, No. 25 to No. 30 wire.

Syrup (from sugar-cane) Machinery.—P. H. Fitzgerald, Fitzgerald, Ga., wants to obtain information regarding the manufacture of syrup from sugar-cane, estimates on cost of machinery, etc.

Telephone Equipment.—John J. Hooker, Webster, N. C., will want to buy about twenty telephone instruments, several miles of copper wire, insulators, etc.

Wooden Buckets, etc.—The Norcross Manufacturing Co., Knoxville, Tenn., wants to correspond with makers of wooden buckets or vessels of two to twenty gallons capacity.

Woodworking Machinery.—Hellams & Elias, Waynesville, N. C., want to buy slack barrel machinery, new or good second-hand.

Woodworking Machinery.—W. G. Leavelle, Hilda, Va., wants box machinery and planer; good second-hand preferred.

Woodworking Machinery.—J. T. Manry, Midway, La., wants prices on new and second-hand spoke and handle machinery.

Woodworking Machinery.—The St. Joseph Wood Works, St. Joseph, Mich., wants a heavy four-side molder for fancy flooring and ceilings, and a 36-inch-wheel band saw, with adjustable resaw attachment.

Woodworking Machinery.—J. H. Abernethy, Shannon, Miss., wants to buy machinery for making and bending rims, spokes and other wagon goods.

Woodworking Machinery.—W. J. Powell, Clinton, N. C., wants spoke, rim and hub machinery.

Wrought-iron Bolts.—See "Creosoting Material, etc."

TRADE NOTES.

A bargain sheet of electric machinery and supplies is issued by the Charles E. Gregory Co., 47 South Jefferson street, Chicago, Ill.

The Roanoke Roofing & Metal Co., of Roanoke, Va., will furnish the galvanized-iron cornice for a three-story, 100x100-foot office building at Columbus, Ga.

The Polar Ice Factory, at Augusta, Ga., will be sold at auction in that city on the first Tuesday in April. All of the power rights and machinery will be sold also.

The contract for the erection of the new jail at Bellville, Texas, has been awarded to the Pauley Jail Building Co., of St. Louis, Mo., at \$19,970. The plans and specifications are by the company.

In another column is advertised a very desirable tract of land on the Elizabeth river, near Norfolk, which would be valuable for manufacturing and shipping purposes. It will be sold to the highest bidder, on April 2, at Norfolk.

A calendar covering the year from April, 1896, to 1897 is issued by the Berlin Iron Bridge Co., East Berlin, Conn. Examples of the iron and steel work supplied by this concern, together with a view of its extensive plant, are illustrated.

The agency for the Eagle Gin Co., Bridge-water, Mass., for the States of Louisiana and Mississippi has been taken by the C. S. Burt Co., New Orleans, La. This arrangement assures the aggressive handling of this gin in the territory mentioned.

A large order of mining screens for a mine on the Pacific coast is being filled by A. J. Beckley & Co., Meriden, Conn. This firm's catalogue is a useful publication to mining companies and others using perforated screens. Many improved styles are shown, and a number of helpful tables are given.

The Davis & Egan Machine Tool Co., of Cincinnati, Ohio, has received from its agent in Brazil one of the largest orders ever secured from South America. This order calls for a number of the largest tools, and amounts to over \$10,000. One of the machines alone will require two freight cars to transport it from the works to New York, from which point it will be shipped to Brazil.

Contracts have been closed by the Emerson Company, Fidelity Building, Baltimore, with Kramer Bros. & Co., Elizabeth City, N. C., for an Emerson automatic compression dry-klin, with a daily capacity of 20,000 feet per day of green pine lumber, and with the Kingston Lumber Co., Kingston, N. C., for an Emerson automatic compression dryer, with a daily capacity of 20,000 feet of green pine lumber per day.

The large factory of Hensch & Dromgold, York, Pa., is taxed to its utmost capacity, and they are obliged to run night work to supply the large demand for circular-saw mills, engines, spring-tooth harrows, corn planters, cultivators and various other agricultural implements which they manufacture. In addition to their domestic trade, they are having a large export trade on saw mills, corn shellers, harrows, etc.

The Southern Log Cart & Supply Co., of Mobile, Ala., agent for the New Jersey Car Spring & Rubber Co., of Jersey City, N. J., manufacturer of rubber belting, packing, hose, etc., has secured contracts for the three large belts to go in the new grain elevator now being built by the Terminal Elevator Co., of Mobile. The main belt will be 1250 feet long, thirty-six inches wide, and is one of the largest belts in the South. The other two belts are nearly as large as this. It is estimated that this large belt will weigh in the neighborhood of four tons.

Mr. Edmund M. Ivens, of Meridian, Miss., has recently built for Rungt & Co., of Cuero, Texas; Fred Zedlar, of Oltune, Texas, and others a heavy surveying box cumulative baling press. This machine, the builder states, will put into one bale of cotton any amount of lint, up to 800 pounds, that a wagon could bring to the gin. The object of this is to put a farmer's entire load of cotton into one single bale, rather than allow a part of a long-distance load to remain on the gin indefinitely.

One of the big contracts which the E. P. Allis Company, of Milwaukee, Wis., has recently secured is that of the Canal & Claiborne Street Railway Co., of New Orleans, La. The Allis Company will build and furnish the latter concern's power-house with two 450-horse-power tandem compound condensing engines, with Reynolds independent air-pump condensers. The engines and condensers will be equipped with the most modern devices for safety and economy, and will be direct coupled to General Electric Co. generators.

The establishment of telephone systems throughout the South continues on an extensive scale. One of the successful Southern concerns that has been in receipt of a good share of the contracts involved in the equipment of these telephone services is the Mason Electrical Works, of Sumter, S. C. The increased demand for this company's work has been of such an extent of late that an increase of capacity is demanded, and it will be arranged for at once. One of the company's recent contracts was that of the Abbeville telephone, at Abbeville, S. C.

Superintendent Price, of Garfield Park, Chicago, Ill., in a recent letter to the Erwin Hydraulic Machinery Co., Milwaukee, Wis., says: "The 'Domestic steam pump, No. 2,' in use for the past three months, meets our requirements, viz: to raise 1000 gallons of mineral water 100 feet from a tubular well four inches in diameter. It does the work daily in two and one-half hours. No attention has been paid to the speeding of the apparatus. Before purchasing your pump, we had in view a water lift at a cost of \$950. The work is done at the present depth of water as satisfactorily as it could be under any circumstances."

Mr. G. G. Arthur, who for a number of years was conducting a large hardware business, has purchased a large interest in the Dorner & Dutton Manufacturing Co., Cleveland, Ohio, and will devote his time to the business, having the title of vice-president and secretary. The company, with its increase of capital, will be able to put in additional new machinery and be enabled to take good care of its largely increasing trade. As manufacturers of electric motors and trailer trucks and special machinery, this concern is well known in electrical and street-car circles. The assurance is given that the superior qualities of its products will be maintained.

The Adolph Busch Manufacturing Co., of St. Louis, Mo., has in operation one of the most successful continuous glass-melting tanks in the country. This tank is about sixty feet long and fifteen feet wide, and is said to be a vast improvement on what is known as the Modes type of continuous tank. The tank was designed and constructed by the Christy Fire Clay Co., of St. Louis, from blocks made of its celebrated washed pot clays. There seems to be no reasonable limit to the capacity of this tank, as the number of bottles taken from it daily would indicate. The glass produced is pronounced by experts to be of a very superior quality. This speaks well for the Christy Fire Clay Co.'s ability in this direction.

The Stillwell-Bierce & Smith-Valle Co. has taken the contract for the complete water-power plant to be installed at the Lachine Rapids, in the St. Lawrence river. This power is second only to Niagara Falls in importance, and is owned by the Lachine Rapids Hydraulic & Land Co., Limited, of Montreal, Canada. This power is located at the famous Lachine Rapids, on the St. Lawrence river, so well known to tourists, about five miles from Montreal. The initial development will amount to 10,000 horsepower. Construction has already begun, and the company expects to be prepared to furnish power before the close of this year. It has contracted with the Stillwell-Bierce & Smith-Valle Co., of Dayton, Ohio, for sixty-six largest size Victor turbines, of the latest pattern, and all the connecting machinery needed for transmitting the power of these turbines to the electric generators. This is thought to be the largest order for turbines ever placed at one time, and should add to the enviable reputation already enjoyed by the Victor turbine.

TABLE OF CONTENTS.

EDITORIAL:	Page.
Increasing Development of Southern Ports	137
Reply to the News and Courier	137
An Important Outline of the Baltimore & Ohio's Policy	138
A Bleachery for South Carolina	138
A Department of Manufactures and Commerce	138
Senator Frye's Bill	138
Summary of New Industries for the First Three Months of 1896	139
Secretary Morton on Baltimore	139
Gold Reduction Works	139
A Wilderness Becomes a City	140
RAILROAD NEWS:	
Baltimore & Ohio's Future	141
Trains into Augusta	141
To Carry Virginia Truck	141
Atlanta & Danville Extension	141
A Texas Road Completed	141
Choctaw, Oklahoma & Gulf	141
More Cattle Shipments	141
The Georgia & Alabama	142
South and West Congress	142
A Prosperous Company	142
The Mississippi Bridge	142
Busy Southern Car Works	142
The Texas Coast Canal	142
A Canal Company's Enterprise	142
Improvements at Port Arthur	142
Improvements at Port Chalmette	142
Improvements to Bay Line Steamers	142
Railroad Notes	143
FINANCIAL NEWS:	
New Corporations	143
New Securities	143
Interest and Dividends	143
Financial Notes	143
The Tennessee Exposition	143
An Important Canal Contract	143
TEXTILES:	
A Cotton King Talks	144
Another 10,000-Spindle Mill for South Carolina	144
A \$10,000 Cotton-Mill Addition at Knoxville	144
Textile Notes	144
COTTONSEED OIL:	
The Market for Cottonseed Products	145
Cottonseed-Oil Notes	145
Telegraph in Texas	145
PHOSPHATES:	
Phosphate Markets	145
Phosphate and Fertilizer Notes	145
The Indiana and the Texas	145
MECHANICAL:	
Contractor's Elevator (illus.)	146
Forsyth's Seamless and Elastic Centre Belting (illus.)	146
New Water Heater and Pump (illus.)	147
The Forbes Plain Miller (illus.)	147
Iron Markets	147
LUMBER:	
Lumber Market Reviews:	
Baltimore	148
Norfolk	148
Charleston	148
Savannah	148
Brunswick	148
New Orleans	148
Beaumont	149
Lumber Notes	149
CONSTRUCTION DEPARTMENT:	
New Enterprises	150
Building Notes	151
Railroad Construction	152
Machinery Wanted	152
Trade Notes	153
Steam Yachts and Marine Machinery	
Build by Marine Iron Works, Clybourn and Southport avenues, Chicago. Free illustrated catalogue. Write them for it.	
One Night's Ride.	
Passengers ticketed over the Missouri Pacific Railway between St. Louis and Kansas City enjoy an elegant night's sleep in Pullman buffet sleeping cars. The prevailing features are smooth rails, excellent accommodations and low rates. Inquire of any ticket agent of the company for full particulars and tickets, the prices of which are within the reach of all.	
Saturday and Sunday Excursion to Washington via Pennsylvania Railroad.	
On Saturday, March 28, and Sunday, the 29th, the Pennsylvania Railroad will place on sale at its Baltimore offices excursion tickets to Washington and return at the rate of \$1.25 for the round trip; tickets good going Saturday and Sunday and valid for return until Monday, inclusive. No better opportunity could be afforded for a visit to the Capital.	

J. WM. MIDDENDORF.

Members Baltimore Stock Exchange.

WM. B. OLIVER.

MIDDENDORF, OLIVER & CO.
BANKERS AND BROKERS,No. 213 E. German Street, [KEYES BUILDING.] Baltimore, Md.
Stocks and Bonds Bought and Sold on Commission. Special attention given to Municipal and other Investment Loans. Dealers in Foreign Exchange. Drafts on Europe and Letters of Credit furnished.**R. B. SPERRY & CO.**DEALERS IN **Southern Investment Securities,**

239 East German Street, Baltimore, Md.

OUR FACILITIES ARE UNEXCELLED.

CLAPP & COMPANY, BANKERS AND BROKERS,
Mills Building, NEW YORK.**STOCKS, COTTON, GRAIN.**Bank Stocks and Municipal Bonds Bought and Sold. Receive Deposits. Allow Interest.
PRIVATE TELEGRAPH WIRES. LONG DISTANCE TELEPHONE.**PERCY A. PICKRELL,**38 Wall Street,
NEW YORK.**INVESTMENT BANKER,**

Dealer in

High-Grade Securities,
Enterprises of Merit Financed.

CORRESPONDENCE INVITED.

JOHN L. WILLIAMS & SONS,
BANKERS,

Dealers in RICHMOND, VA.

Southern Investment Securities,

MUNICIPAL BONDS A SPECIALTY.
Correspondence Invited.**ANDREW MAYER,**

10 Wall Street, New York.

Investments. Street Railways,
Loans on Collateral, Electric Light Plants,
Commercial Paper, Gas and Water Works,
Capital Procured, Constructed and Reorganized.
Correspondence Solicited.**Maryland Trust Co.**Corner South and German Sts.
BALTIMORE.

CAPITAL, - \$1,000,000.

**A LEGAL DEPOSITORY FOR COURT
AND TRUST FUNDS.**Acts as Financial Agent for States, Cities,
Towns, Railroads and other Corporations.
Transacts a general trust business. Lends
money on approved security. Allows interest
on special deposits. Acts as Trustee under
Mortgages, Assignments and Deeds of Trust;
as Agent for the Transfer or Registration of
Stocks and Bonds, and for the payment of
coupons, interest and dividends.J. WILLCOX BROWN, PRESIDENT.
LLOYD L. JACKSON, VICE-PRES.
J. BERNARD SCOTT, Secretary and Treasurer.**DIRECTORS:**J. Willcox Brown,
Wm. A. Marburg,
H. J. Bowdoin,
Basil B. Gordon,
Lloyd L. Jackson,
Fred. M. Colston,
Joshua Levering,
Frank Brown,
W. B. Brooks, Jr.,
W. H. Baldwin,
Fredk. W. Wood,
John B. Garrett,
Leopold Strouse,
Henry Walters,
H. A. Parr,
B. N. Baker,
Andrew D. Jones,
James Bond,
Alexander Brown,
T. K. Worthington,
Clayton C. Hall,
Douglas H. Gordon,
J. D. Baker,**SURETY BONDS OF EVERY KIND.**
American Banking & Trust Co.

OF BALTIMORE CITY.

Equitable Building, Baltimore.

Capital, fully paid, - \$500,000
Stockholders' Liability, - 500,000JAMES BOND, President.
JOHN HUNTER, Vice-Presidents.
JOSHUA HORNBER, Secretary-Treas.
JOHN T. STONE, Counsel.
JOHN K. COWEN, Counsel.Gives security for Executors, Administrators,
Trustees, Receivers, officers of Banks, Corpora-
tions, Lodges and Societies, Contractors, Clerks,
Messengers, Conductors, Motormen, and all
other employees, &c.

GUARANTEES THE FULFILLMENT OF CONTRACTS.

WHATLEY & COMPANY,

Investment Brokers,

**STATE, COUNTY,
MUNICIPAL,
and CORPORATION BONDS**

Washington Loan & Trust Building.

WASHINGTON, D. C.

Correspondents in BOSTON, NEW YORK,
PHILADELPHIA, ST. LOUIS, CHICAGO,
MINNEAPOLIS. Colonize Southern lands. Pro-
mote industrial enterprises. Sell timber and
mineral properties. Procure capital for invest-
ments of merit. Solicit correspondence with
those desiring to locate industries in Southern
States. Invite co-operation with cities, towns,
individuals and corporations having induc-
ments to offer industries, immigration and capital.
HIGHEST REFERENCES.**To the Security-Holders of the
Baltimore & Ohio Railroad Co.**We, the undersigned, at the request of the
Johns Hopkins University, the financial institu-
tions of this city and other of the largest security-
holders of the Baltimore and Ohio Railroad Com-
pany, representing both the bonds and stocks,
have consented to act as a committee for the pro-
tection of such securities.A majority of the stock and millions of the bonds
of the Baltimore and Ohio Railroad Company are
held by the people of this State, and it is our pur-
pose to protect all interests to the full extent.This committee has adopted the following gen-
eral plan of operation, which will guide it in its
work:(1) It is proposed to act for the stockholders
and all the bondholders of the Baltimore and Ohio
Railroad System, omitting none; and the Commit-
tee will call for the deposit of these securities
when, in its judgment, it may be necessary to do
so in order to carry out its general purpose.(2) In the judgment of the Committee it is for
the best interests of the bondholders and stock-
holders that the integrity of the system be pre-
served; and it is believed that, under proper man-
agement and by such concessions as may be nec-
essary, this property can, in a reasonable time, be
restored to its former prestige without affecting
its charter rights.(3) The Committee will undertake to represent
in any litigation the interests of all the bond and
stockholders whose securities may be deposited
with the Mercantile Trust and Deposit Company
of Baltimore or with the Union Trust Company of
New York, under such agreement as may be con-
sidered most desirable, and will take whatever
steps it may deem necessary to protect their rights.In further pursuance of this plan the Committee
withholds for the present the request for the de-
posit of securities, but will call for them when
and as the necessity arises.ALEXANDER SHAW, Chairman of Baltimore and
C. MORTON STEWART, Ohio
JOHN GILL, Railroad
J. G. HARVEY, Company
T. EDWARD HAMBLETON, Reorganization
JAMES L. McLANE, Committee.
D. FAHNESTOCK,
JOHN M. NELSON, Secretary, of South St.
BROWN & BRUNE, Counsel to the Committee.**ASPHALT PAVEMENTS**

Enhance the Value of Property One-Third.

DURABLE HEALTHFUL NOISELESS

20,000,000 square yards laid in eighteen years.

For plans and estimates apply to

THE BARBER ASPHALT PAVING COMPANY,
1 Broadway, New York City.**NOTICE.—AUGUSTA AND KNOX-
VILLE RAILROAD AND PORT
ROYAL AND WESTERN CARO-
LINA RAILWAY.**—Any and all persons
entitled to share in the distribution of the
proceeds of sale of the property of the Port
Royal and Western Carolina Railway
Company system, under the decree of the
United States Circuit Court for the
District of South Carolina, of August 1,
1895, in the cause entitled Charles H.
Phinizz and Alfred Baker, Trustees, versus
the Augusta and Knoxville Railroad Com-
pany and the Port Royal and Western
Carolina Railway Company and the Central
Trust Company, and the other causes
united therewith, are hereby notified to
present their demands for payment of the
respective amounts payable thereon, duly
certified to the undersigned, at his office,
No. 16 Broad street, Charleston, S. C.,
on or before the 30th day of March, 1896,
in order that provision may be made for
the settlement of the same.
THEODORE C. BARKER, Special Master.
Charleston, S. C., March 9, 1896.**FOR SALE,**In the city of
CHARLESTON, S. C.An ideal city for a winter home, full of historic
interest, and a climate mild and soft in winter,
but not hot enough to be enervating.
A Beautiful

Old Colonial Residence

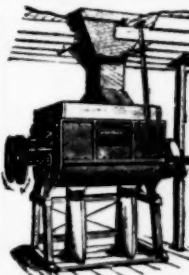
And a Handsome

Large Modern Residence.

And Several Choice BUILDING LOTS.

The City of Charleston water supply is ob-
tained from artesian wells, and it has recently
been proven to be a valuable dyspeptic cure
when used as drinking water, and a rheumatic
cure when bathed in hot. Both of these res-
idences are supplied with this water.Also Farming Lands near Charleston, suitable
for market gardens, which is a very profitable
industry in the neighborhood.

For further particulars address

Exchange Banking & Trust Co.
Charleston, S. C.**THE BOOMER & BOSCHERT
KNUCKLE JOINT****PRESS**FOR BALING
Cloth, Paper, Yarn, &c.Or for any other purpose re-
quiring great pressure.**BOOMER & BOSCHERT PRESS CO.**
888 W. WATER ST., SYRACUSE, N. Y.**THE BROUGHTON
DRY MIXER,**
FOR
Hard Plaster, Cement, Paint, &c.
W. D. DUNNING,
86 W. Water St.
SYRACUSE, N. Y.**THE UNION CENTRAL
LIFE INSURANCE COMPANY**

of Cincinnati, Ohio.

Assets over \$13,000,000."One of the most pushing, thriving life com-
panies in the land."—Ins. Age, N. Y. City.
Highest interest rate. Lowest death rate.
Safest investments.**JOHN M. PATTISON, E. P. MARSHALL,**
President. Secretary.
JOHN A. HERNDON, Jr., State Agent,
Manufacturers' Record Bldg. Baltimore, Md.**WM. B. BANKHEAD,**

LAWYER,

HUNTSVILLE, ALABAMA.

Collections for Foreign Parties a Specialty.

For Sale or Exchange.A rare bargain, 24,000 Acres of Choice Yel-
low Pine Lands in South Georgia, lying alongside
the railroad for about eight miles. Will sell or
exchange, taking a small portion in cash.Address promptly **LAND TRUST CO. OF
GEORGIA,** Rooms 701, 702, 703 Temple
Court Building, Atlanta, Ga.**PROPOSALS.****TREASURY DEPARTMENT,** Office Supervi-
sing Architect, Washington, D. C., March 23,
1896.—Sealed proposals will be received at this
office until 2 o'clock P. M. on the 17th day of
April, 1896, and opened immediately thereafter,
for all the labor and materials required for the
interior finish, plumbing, approaches, etc., for the
U. S. Postoffice at Roanoke, Va., in accordance
with drawings and specification, copies of which
may be had at this office at the office of the
Superintendent at Roanoke, Va. Each bid must
be accompanied by a certified check for not less
than 2 per cent. of the amount of the proposal.
The right is reserved to reject any and all bids
or to waive any defect or informality in any bid
should it be deemed in the interest of the Gov-
ernment to do so. All bids received after the
time stated will be returned to the bidders. Pro-
posals must be enclosed in envelopes, sealed and
marked, "Proposal for Interior Finish, Plumbing,
Approaches, etc., for the U. S. Postoffice at
Roanoke, Va.," and addressed to **WM. MARTIN
AIKEN,** Supervising Architect.**NOTICE TO BUILDERS.**Sealed bids will be received for the erection
and completion of a Courthouse at Douglassville,
Ga., until 12 o'clock April 6th 1896. Plans and
specifications can be seen at the Ordinary's
office in Douglassville, also at the office of
ANDREW J. ERYAN & CO., Architects, 344 and
346 Equitable Building, Atlanta, Ga. For further
information address the architect.**NOTICE TO CONTRACTORS.**Sealed bids will be received by the
undersigned up to the 2d April, 1896, for
the erection or construction of a combined
system of Waterworks and Electric Lights
for the City of Dublin, Ga., in accordance
with the survey and plans now in the hands
of the Clerk, City of Dublin. Specifica-
tions and Drawings will be furnished bid-
ders at cost of (\$1.00) one dollar each.
Work to commence on said plans by SEP-
TEMBER 1st, 1896.For further particulars apply to the
chairman or John D. Prince. This Febru-
ary 10, 1896. **N. B. BAUM,** Chairman.

ESTABLISHED 1844.

S. Munn, Son & Co. COTTONGRAIN AND PROVISION
MERCHANTS**NEW YORK CITY.** Send for circular. Solicit orders for future delivery.**H. W. JOHNS' ASBESTOS
SECTIONAL PIPE
COVERINGS.****NON-CONDUCTING COVERINGS FOR STEAM AND HOT WATER PIPES, BOILERS ETC.**
READILY ATTACHED OR REMOVED BY ANYONE. ASBESTOS BOILER COVERINGS

WE ARE PREPARED TO TAKE CONTRACTS FOR APPLYING STEAM PIPE AND BOILER COVERINGS IN ANY PART OF THE UNITED STATES.

H. W. JOHNS ASBESTOS MILLBOARD, SHEATHINGS, BUILDING FELTS, FIRE PROOF PAINTS, LIQUID PAINTS, ASBESTOS ROOFING, ETC.**H. W. JOHNS MANUFACTURING COMPANY,**

87 MAIDEN LANE, N. Y. JERSEY CITY, CHICAGO, PHILADELPHIA, BOSTON, LONDON

SPECIAL Advertisements OF GENERAL Interest.

OPPORTUNITIES FOR INVESTORS.

ICE PLANT FOR SALE. COMPLETE.

Capacity, 30 tons daily. Must be removed at once. A great bargain for any one who can use such a plant. Easy terms offered. Address **THE PEOPLE'S PURE ICE CO.**
218 North Union Street, Chicago, Ill.

WANTED.

TO SELL \$10,000 COTTON MILL STOCK in the South. 10 per cent guaranteed and a position. Address "COTTON STOCK" care Manufacturers Record.

PARTNER WANTED

In an Established Wholesale Lumber Business in the South; one who can furnish \$5000 or more capital. Address PARTNER, care Manufacturers' Record.

MANUFACTURERS or others desiring competent representation in the vicinity of Cincinnati are requested to address E. S. JACKSON & CO., Cincinnati, O.

WANTED.

Agents everywhere—To represent a leading manufacturing company for its high grade of **ASBESTOS STEAM PIPE and BOILER COVERINGS.**

Excellent opportunities for the right parties. For particulars address

PIPE COVERING.

Care Manufacturers' Record.

\$30,000 WANTED

For TEN years

At 5 per cent. per annum.
Approved Security. First
Mortgage on real estate in
the City of Tampa, Fla.

For details write to

SOLON B. TURMAN,
TAMPA, FLA.

FOR SALE.

\$10,000 Worth of Stock

In a comparatively new 5000 Spindle COTTON MILL, located at Athens, Tenn., on Southern Railway, with side tracks. Good steam coal put in mill yard at \$1.20 per ton. Productive capacity of mill 25,000 lbs. No. 8s to No. 12s yarn weekly. Labor cheap and plentiful. Mill now paying, and with additional capital will pay handsomely. Ten per cent. dividend guaranteed on investment. For particulars apply to

J. D. KENNEDY,

ATHENS, TENN.

FOR SALE.

YELLOW-PINE Timber Lands
Address W. A. WILCOX, Darien, Ga.

A PROSPEROUS

Cotton Mill

IN THE PIEDMONT BELT OF SOUTH CAROLINA

Can be bought outright, together with 5000 acres of rich farming land in the vicinity of the property, or the owner will dispose of \$50,000 worth of stock under most favorable conditions.

Advanced age and a desire to be relieved of business responsibility causes the step. The mill has

ALWAYS PAID A SATISFACTORY PROFIT

and has unexcelled advantages in the way of railroad facilities, water power and nearness to raw material. The farming lands mentioned above have always yielded good returns for the money invested in them. This is undoubtedly a most desirable chance to invest in a profitable line of business, and I will be pleased to correspond with all interested parties. Address

J. T. MARION,

Collonade Hotel, 726 Broadway, New York.
Or to **J. M. MARION,** Chester, S. C.

CAPITAL WANTED.

An opportunity is offered for parties with surplus capital to invest in a paying cotton factory with abundant water-power, situated in North Carolina in the cotton belt. Owners wish to increase their business. Mill paying a handsome dividend. Address "W." care Manufacturers' Record.

RARE CHANCE

FOR COTTON MILL INVESTMENT.

Party or corporation wanting to locate cotton mill in the South can buy new building, partly equipped with new machinery, and save from \$50,000 to \$75,000 by addressing P. O. BOX 6866, Atlanta, Ga.

COTTONSEED OIL REFINERY FOR SALE.

A first-class modern refinery, located on seven acres of ground at junction of two competing railroads, with necessary switches, storage, tanks, cooper shop, etc., all complete and in perfect order and condition. Apply to **O. S. KLINE & CO.,** 516 West Jefferson Street, Louisville, Ky.

Sprinkler System Equipment

FOR COTTON MILLS OR OTHER MANUFACTURING PLANTS.

Offering for sale at a low price an Automatic Sprinkler and Hydrant System, fitted for a Cotton Mill underwriters' requirements. Standard material.

The outfit was shipped to a mill and not being paid for, hence not delivered, this mill never completed, owners are anxious to sell. Anyone interested and who can use it will be furnished a printed schedule, and price made on same; a copy of diagram of system can also be furnished. Enquire of

JOHN G. RUGE,

APALACHICOLA, FLA.

Do You
Want to
BUY

GOLD MINES?
MICA MINES?
MONAZITE MINES?
TIMBER LANDS?
FARMING LANDS?
FRUIT-RAISING LANDS?

WRITE ME.

I have lots of such property for sale ranging from 100 to 11,200 acres in extent.

S. GALLERT,

Rutherfordton, N. C.

Saw Mill FOR SALE

TO CLOSE AN ESTATE.

Almost new, Engine, Boiler, Band Mill, two Gangs, Lath and Picket Mill, Trucks, etc. Also 6000 feet T Rails.
Sold at a bargain on very easy terms.
Address

WOOLVERTON & TINSMAN,
WILLIAMSPORT, PA.

A Rare Opportunity. FOR SALE.

A Complete Double SAW MILL, fully equipped, modern Machinery, capacity 75,000 feet per day, situated on deep water Port of Darien, Ga., 600 feet of Wharfage facilities, 277 Acres of Land, Buildings, Store, Dwellings, etc. Price Low, terms easy. Address

JESSE O. WOODHULL, Trustee,
16 Beaver Street, NEW YORK CITY.

ELEGANT HOTEL FOR SALE

AT MEMPHIS, TENN.

Under an order of Court, the Gayoso Hotel, at Memphis, Tenn., four stories high, and occupying about 200 feet of frontage, completely and handsomely furnished and equipped, will be sold as a whole, on THURSDAY, APRIL 30, 1896, upon the premises. The Hotel has 207 rooms, can accommodate 450 guests, with dining-room seating capacity of 250 or more. It is one of the oldest established hotels in the South, and within several years past has been remodeled, refitted and refurbished, having an electric plant of its own, and every other appointment to make it a first-class, profitable and attractive hotel, and is now in successful operation and will so continue until delivery to the purchaser.

TERMS OF SALE—Twenty-five Thousand (\$25,000) Dollars cash, and the balance in one, two, three and four years, with notes bearing 6 per cent. interest, with security, and a lien retained, equity of redemption barred. The lowest bid to be entertained will be One Hundred Thousand (\$100,000) Dollars.

A complete inventory of its outfit, together with an abstract of title, can be seen and examined at my office. Correspondence solicited, and any further information desired will be given. The sale is made under an order of Court, and without reserve, except as to the minimum bid of \$100,000.

R. H. BEARD,

Clerk and Master and Commissioner.

FINE WATER-POWER SITE FOR SALE.

STATE OF GEORGIA, RICHMOND COUNTY.—Will be sold on the FIRST TUESDAY IN APRIL NEXT, 1896, during the legal hours of sale, before the Court House door in the city of Augusta, county of Richmond, State of Georgia, the following described property, to wit:

All that lot, with improvements thereon, situate, lying and being in the city of Augusta, county and State aforesaid, on the second level of the canal between Marbury and Kollock streets; bounded south by second level of canal, west by Augusta Oil Works, north by third level of canal and east by lot and raceway of Jiles M. Berry and arm of canal running to City Pump House, with an alley running through the lot from east to west, known as the Polar Ice Factory. Together with the buildings and improvements thereon; all the water privileges (225 H. P.), water-wheels, ice machines, tanks, pipes, boilers, condensers, filters, materials, tools, fixtures and conveniences of every kind and description connected with and used by the Polar Ice Company in their business of ice manufacturing.

GEORGIA RAILROAD BANK.

COAL PROPERTY

FOR SALE,

In Birmingham, Ala., District

Company holds 20-year lease on 1000 acres of fine coal land. First-class domestic coal. Will also make fine coke. Mines already open. Capacity 300 tons per day.

Drift Mining, cheapest in Alabama.

Royal'y 3 cts. per ton,

No Restrictions.

Lease and improvements for sale cheap.

A golden opportunity for party with small capital. Investigation solicited.

Good Reason for Selling.

Address quick.

"ALABAMA,"

Care Manufacturers' Record.

If you wish to keep posted on the progress of the South, read the Manufacturers' Record. Price \$4.00 a year.

Kaolin and Corundum

FOR SALE.

Large deposit of superior Kaolin near railroad, and the most extensive property of massive Corundum ever found. For particulars write

F. R. NEWITT, Newitt, Swain County, N. C.

FOR SALE-CHEAP.

A four gang MARBLE MILL and QUARRIES—one quarry and mill located at Loudon, Tenn. This mill must be sold or leased within the next few months, and the best offer gets the mill. Will sell or lease mill separate from quarries if so desired. Address

N. H. GREER,

LOUDON, TENN.

COMMISSIONERS' SALE OF THE "POINDEXTER PROPERTY," WITH ITS

VALUABLE WATER FRONTS ON THE
ELIZABETH RIVER, NEAR
NORFOLK, VA.,

OPPOSITE THE U. S. NAVY-YARD.

In pursuance of two decrees of the Circuit Court for the city of Norfolk, Va., one entered on the 19th day of November, 1895, and the other on the 7th day of January, 1896, in the chancery suit therein pending under the style of "The Industrial and General Trust, Limited, of London, England, and others, plaintiffs, against the Nitro-Phosphate Syndicate, Limited, of London, England, and others, defendants," we shall sell at public auction, at the Real Estate Exchange, No. 115 Main Street, Norfolk, Va., beginning at 11 o'clock A. M., on THURSDAY, THE 2D DAY OF APRIL, 1896, the following property, to-wit: A CERTAIN TRACT OF LAND, situated on the east side of the southern branch of the Elizabeth river, in the county of Norfolk, near the city of Norfolk, containing 119 acres, more or less, which was formerly owned by Carter B. Poindexter, and more recently by Charles Lennig, and now by the Nitro-Phosphate Syndicate, Limited, of London, England.

The property is situated opposite the United States navy-yard, in the harbor of Norfolk, is just outside the limits of the town of Berkley, a short distance from the lines of the Norfolk & Western and Norfolk & Southern railroads, and is intersected by the line of a proposed belt railroad. It has a harbor or river front of over 2400 feet with the channel of the river, running very near the shore line. I also have a large frontage on two estuaries of said river.

The property has been divided into building lots, manufacturing sites, villa sites, and waterfront lots, varying in size from half an acre to two acres, and into streets, alleys, etc.; but by the terms of said decree it will be first offered at said sale as a whole, and will be struck off to any person or persons whose bid will be sufficient to pay off and discharge the indebtedness mentioned in said suit, together with the cost of said suit, the expenses of said sale and all arrears of taxes, estimated to be about \$50,000. If no such bid is received and accepted, then the said property will be sold in lots and sites, according to a plat thereof made by Graham & Riddle, civil engineers, of Norfolk, Va., which may be seen at the office of either of the undersigned commissioners, and copies of which may be had on application to either of them or to the undersigned auctioneer.

This property offers extraordinary inducements to parties seeking industrial, manufacturing, or residence sites, and to investors generally.

TERMS—One-third of the purchase price in cash, and the residue in two equal instalments, at six and twelve months from the day of sale, the purchaser or purchasers to give bonds for such deferred instalments, carrying interest at 6 per cent. per annum from the day of sale, with the right on the part of said purchaser or purchasers to anticipate the payment of such bonds at any time upon paying interest to the date of such anticipation; or the whole purchase money may be paid in cash, if the purchaser so elect, the title to be retained till the whole purchase money is paid and a conveyance ordered by the Court.

JOHN H. LEWIS,

Law Building, Lynchburg, Va.;

WM. H. WHITE,

No. 82 Main Street, Norfolk, Va.,

Special Commissioners.

T. F. ROGERS,

Auctioneer,

Norfolk, Va.

VIRGINIA—IN THE CLERK'S OFFICE OF THE CIRCUIT COURT FOR THE CITY OF NORFOLK, ON THE 10TH DAY OF JANUARY, 1896:

I, Lawrence Waring, clerk of the said court, do certify that the bonds required to be given by the special commissioners named in the decrees entered on the 19th day of November, 1895, and 7th day of January, 1896, in the suit of the Industrial and General Trust, Limited, of London, England, and others, against the Nitro-Phosphate Syndicate, Limited, of London, England, and others, have been duly executed and filed.

Given under my hand this 10th day of January, 1896.

LAWRENCE WARING,

Clerk of the Circuit Court for the city of Norfolk, Va.